INDITEX

# i+Child Care Furniture

## Inditex Precautions and Limits for Users Safety for Child Care Furniture

2020

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# I. DEFINITION AND SCOPE

## DEFINITION OF INDITEX PRECAUTIONS AND LIMITS FOR USERS SAFETY FOR CHILD CARE FURNITURE

Inditex Precautions and Limits for Users Safety for Child Care Furniture (hereinafter, **i+CCF**) is defined as a product health and safety standard that:

- Has been developed by Inditex in conformity with the legislations of the main markets in which it has commercial presence, including, but not limited to, the European Union (EU); Canada; United States of America (USA); People's Republic of China (China); Japan; the Republic of Korea (South Korea); Taiwan; Australia; New Zealand and Special Administrative Region of the People´s Republic of China (Hong Kong).

- Includes the provisions and safety requirements (dimensional, assembling, physical, mechanical tests, etc.) that must be fulfilled by a child care furniture, which are intended to be commercialized in the aforementioned markets.

- Regulates those 'substances and parameters the use of which is legally limited' and which, if present in the products above certain levels, could be hazardous for human health.

- **i+CCF** is of general and mandatory application for all Child Care Furniture commercialized by Inditex.

- The Supplier is the only party responsible for the compliance of the products supplied to Inditex with **i+CCF**.

In this standard, a detailed study and review of the most important regulations worldwide is gathered, to provide a general understanding about product health and safety compliance. If you, as an Inditex supplier, are manufacturing Child Care Furniture that do not meet the requirements of this standard, please contact Inditex Sustainability department (i+ccf@inditex.com) to get further information on how to achieve compliance of your products with Inditex requirements for Child Care Furniture.

Inditex has made all reasonable efforts to ensure the accuracy of all the information provided in this standard. However, the information contained in, or accessed through this document, is provided by Inditex for general guidance purposes only and it should not be considered or used as a substitute for any legal requirement. It is the supplier's responsibility to comply with the applicable regulations of the countries where Inditex commercializes its products.

Finally, and regardless of the commitment accepted by the Supplier to control the parameters regulated in **i+CCF**, Inditex will verify its correct implementation at any phase of the manufacturing process by carrying out 'Routine' and 'Random Sample' analysis on selected 'Models/Quality'.

## DEFINITION OF CHILD CARE FURNITURE

The Child Care Furniture are products designed to safely ensure and facilitate seating, changing, sleeping, transportation and protection for young children.

This standard only apply to child care furniture. Other kind of products of child care (soother holder,shotters, baby carriers, etc) are not included in the scope of this standard.

Particularly in this standard, the following articles are considered child care furniture: cots (called cribs in the USA and Canada), minicots (known as cribs in Europe and cradles in USA, Canada, Australia and New Zealand), carrycots (bassinets in USA and Canada), high chairs, changing products and mattresses for cots and minicots.

## DEFINITION OF COT

For the purposes of this standard, a cot is a childcare article consisting of a small bed with raised edges or rails, whose main function is to provide sleeping accommodation or for the care of infants, under 24 months of age or whose height does not exceed 89 cm, and has been designed for household use only.

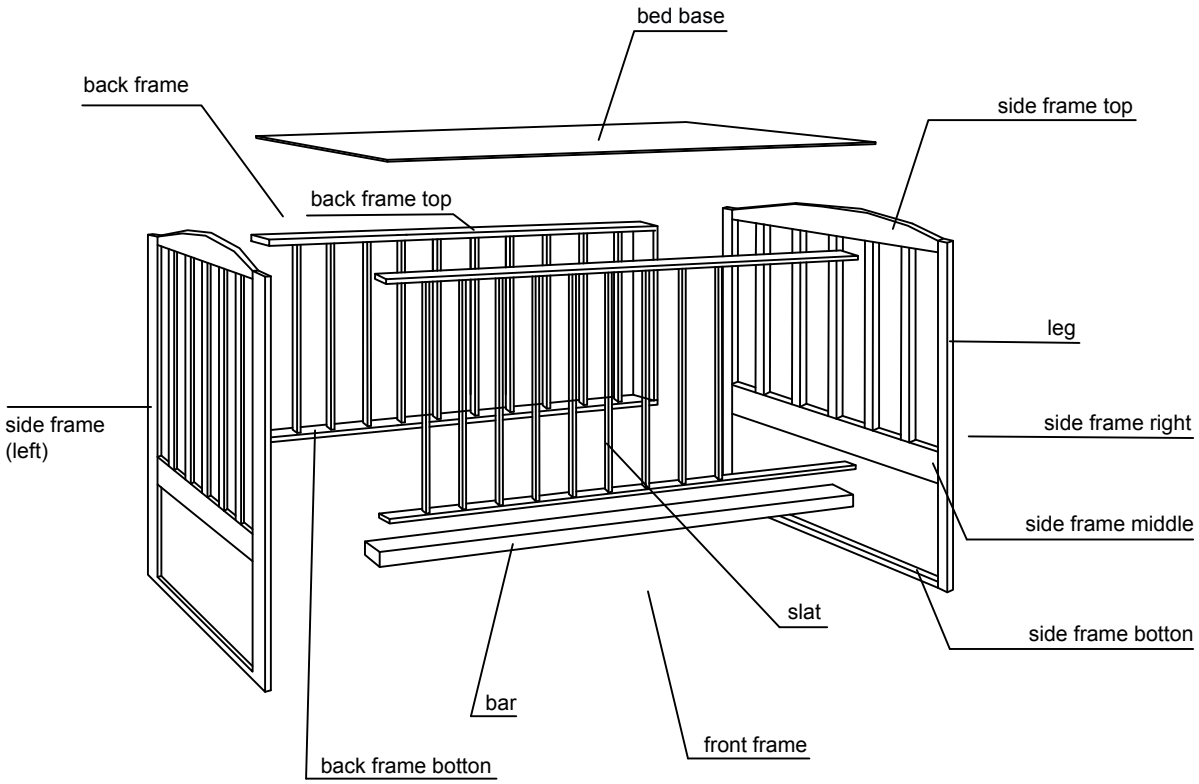


***Figure 1.*** *Representation of the main parts of the cots.*

## DEFINITION OF MINICOT

For the purposes of this standard, a minicot/rocking minicot is a small bed to provide sleeping accommodations for infants, supported by free standing legs, a stationary base/stand, a wheeled base, a rocking base, or a base which can swing relative to a stationary base.

It is considered an article of furniture intended for an infant up to approximately 5 months in age and wich internal length of base not exceed 90 cm. In addition, the sleeping surface shall be greater than 4.000 $cm^2$ but less than or equal to 5.500 $cm^2$.

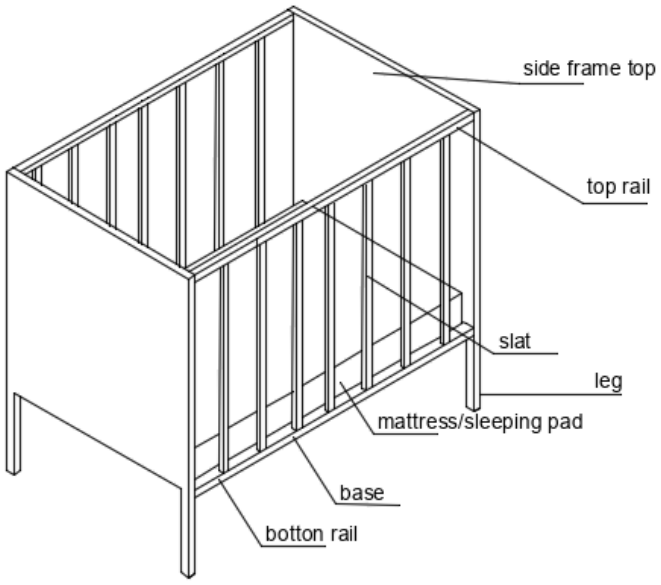


***Figure 2.*** *Representation of the main parts of the minicot.*

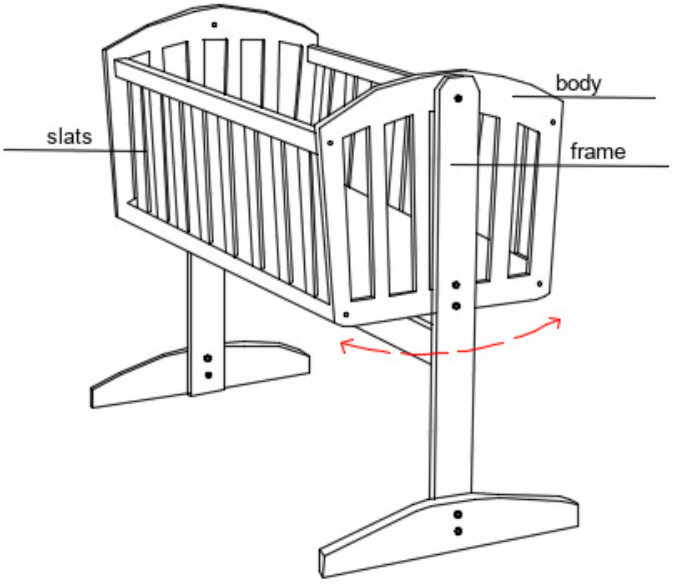


***Figure 3.*** *Representation of the main parts of the type rocking minicot.*

## DEFINITION OF CARRYCOTS

For the purposes of this standard, a carrycot is a small bed to provide sleeping accommodation for infants, supported by free standing legs, a stationary base/stand, a wheeled base, a rocking base, or a base which can swing relative to a stationary base.

The products have to comprising a base, sides, ends and carrying handle(s), within which a child can be laid down and transported by hand. In addition, the sleeping surface area shall be less than 4.000 $cm^2$ and it can be used alone or with the stand.

These products are intended for a child who cannot sit unaided, roll over or push up on its hands and knees, with a maximum weight of 9 kg.

In this document are included all types of carry cot with rigid or soft sides as well as moses baskets and any similar products.

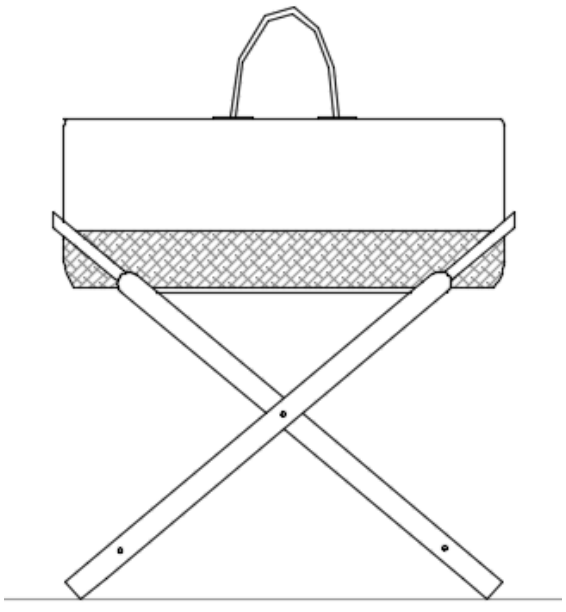

***Figure 4.*** *Representation of a carrycot.*

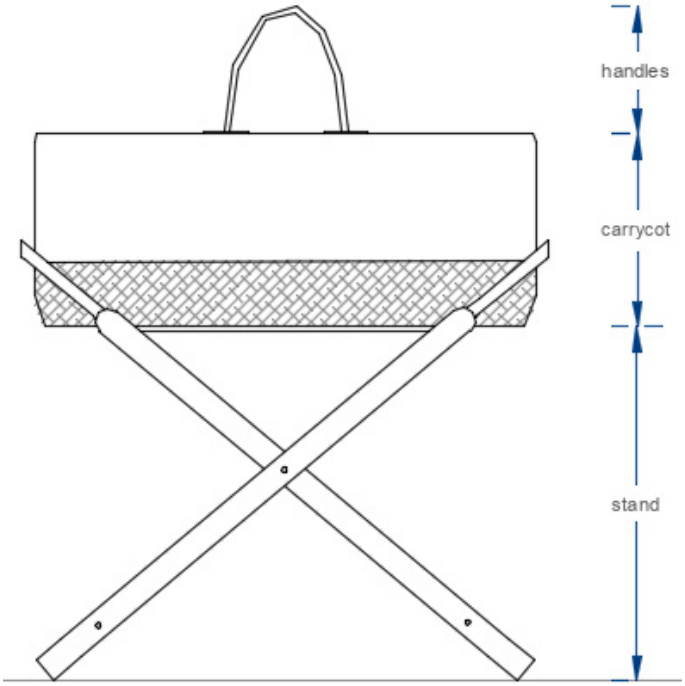


***Figure 5.*** *Representation the parts of a type carrycot.*

## DEFINITION OF HIGH CHAIR

For the purposes of this standard, a high chair is a free-standing chair that elevates the child to approximately dining table height. It is intended for holding a child from 6 months to 36 months of age and up to 15 kg who is capable of remaining in a sitting position due to his or her own coordination.

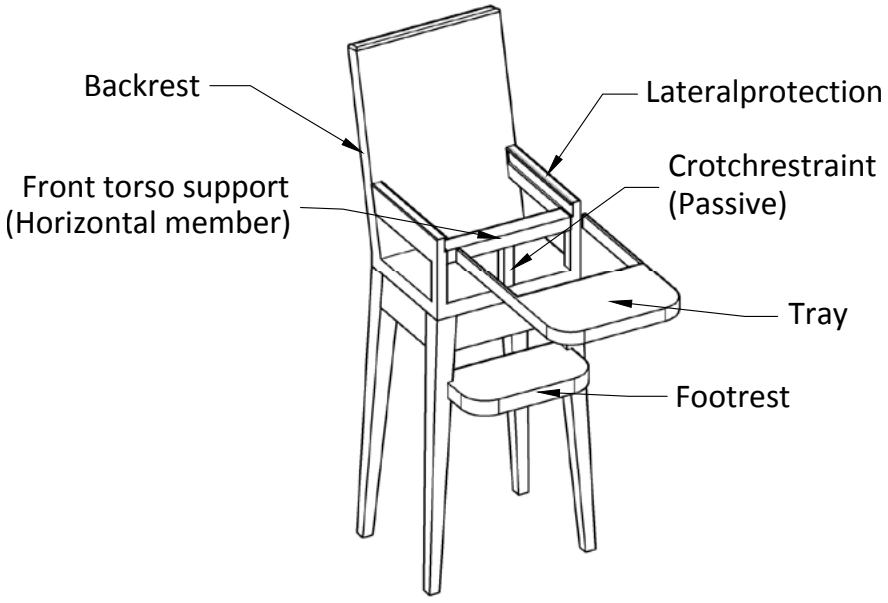


***Figure 6.*** *Representation of the main parts of a high chair with a passive restraint system.*

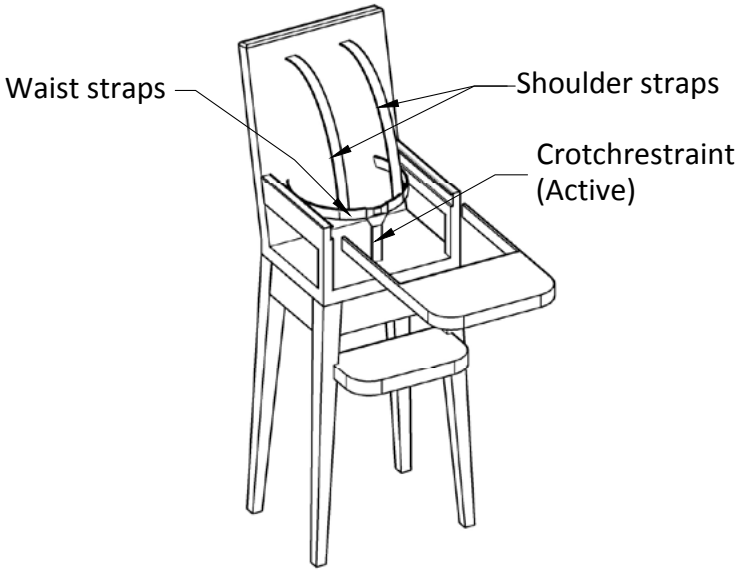


***Figure 7.*** *Parts of an active restraint system.*

## DEFINITION OF CHANGING PRODUCTS

### Definition of Changing table

A Changing table is a child care furniture consisting in an elevated, freestanding structure designed to support and retain a child in a horizontal position for the purpose of allowing a caregiver to change the child´s nappy. The article is intended to children with a body weight up to 13,6 kg and for domestic use.

- **Type 1 changing unit:** changing unit intended for use for children from birth up to an age of 12 months, up to 11 kg in accordance with the manufacturer's instructions for use.

- **Type 2 changing unit:** changing unit intended for use for children from birth up to 13,6 kg in accordance with the manufacturer's instructions for use.

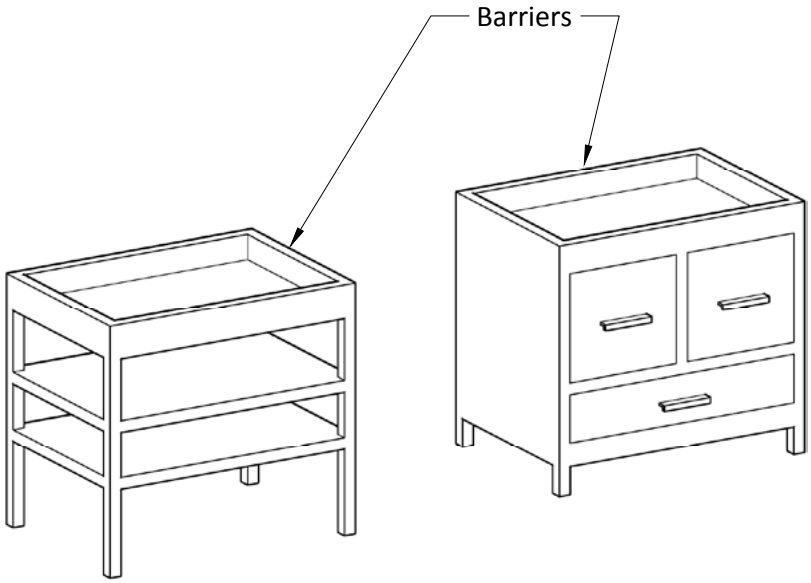


***Figure 8.*** *Several examples of changing tables.*

### Definition of Changing Pad

A changing pad is a flat or contoured pad specifically designed for the purpose of changing the diaper of a child with a body weight of up to 13.6 kg on an elevated surface. The child is placed on the pad during the process of changing.

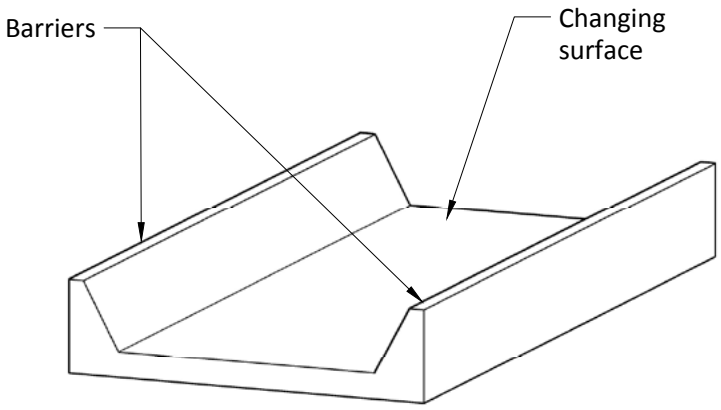


***Figure 9.*** *Example of contoured changing pad.*

### Definition Add-on Changing unit

Add-on changing unit is a rigid addition to or separate product used in conjunction with an item of furniture that provides barriers to prevent the infant from rolling off the product when a diaper is being changed.

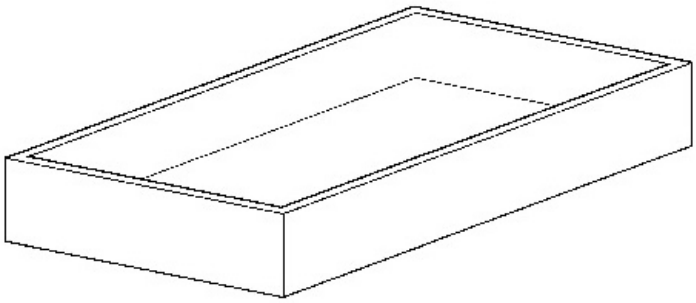

***Figure 10****. Add on changing unit.*

## DEFINITION OF MATTRESSES FOR COTS AND MINICOTS.

For the purposes of this standard, the mattresses for cots and minicots are a a fabric case filled with soft, firm, or springy material, used for sleeping on.

# II. INITIAL CONSIDERATIONS

# INITIAL CONSIDERATIONS

This standard covers only the Child Care Furniture described and defined in section I. Additional Child Care Furniture like suspended cribs, bed side sleppers and hand held carrier sits do not fall under the scope of this standard.

In the event of any additional parameters that are not included in this standard, and which manufacturers intend to take into account during the design and manufacture of a child care furniture, it shall be necessary to contact Inditex Sustainability Department.

Inditex has created a single model of cot for domestic use, whose main characteristics are described below (please see Section III.1):

- The manufacture of cots with irregular shapes is permitted.[1]
- Folding cots or travel cots are not covered by this standard.
- Cots made of mesh or any other flexible material are not covered by this standard.
- The use of child restraint systems in cots is prohibited by this standard.

# III. SAFETY REQUIREMENTS

# III.1 COTS

## INTRODUCTION

### Generalities

- The requirements of this standard apply only to cots for domestic use.
- With the exception of the safety requirements specified in clauses III.1.C.1 Materials and surfaces and III.1.C.2 Flammability of textiles, coated textiles, plastic coverings and filling materials, which apply before or after testing, all the safety requirements apply both before and after testing.

### General evaluation conditions

- All evaluations are designed to be applied to a cot that is fully assembled and ready for use. In addition, unless otherwise specified, the cot shall be assembled according to the manufacturer's instructions supplied with the cot.
- Before evaluation:
  - Immediately, the item to be tested shall be in a room with ambient temperature of 23±2 °C and a relative humidity of 50±5% for at least one week prior to testing.
  - The detachable parts shall be tightened, and may not be tightened again throughout the test.
- Evaluation shall be conducted:
  - within this range of temperatures and humidity. In addition, in case of joints in woods and similar materials to which an adhesive is applied, at least 4 weeks shall have passed for them between production and test time under the above described room conditions.
  - on a rigid, horizontal and flat surface, such as a concrete floor which may be covered with thick vinyl floor covering (3 mm).

# III.1.A DIMENSIONAL REQUIREMENTS

## 1 ¿What are they?

Dimension is the measure of a physical quantity[2] in a given direction and orientation. Consequently, dimensional requirements, also known as dimensions, are the characteristics or metric properties of a particular part or component of the cot.

## 2 ¿Which are the mandatory requirements?

In order to ensure compliance with the requirements established by Inditex, the supplier must review all the parameters listed in the following table, which are applicable to specific parts or components of the cot:

| DIMENSIONAL PARAMETER | INDITEX REQUIREMENT | REGULATION / TEST METHOD |
|---|---|---|
| **III.1.A.1 Cot dimensions[3]** | · Option 1[4]:<br>- 1314mm ≤ IL ≤ 1346 mm.<br>- 694 mm ≤ IW ≤ 726 mm.<br>· Option 2[5]:<br>- IL < 1263 mm or IL > 1397 mm; and/or<br>- IW < 643 mm or IW > 777 mm. | 16 CFR § 1219.1 (2) (c) (iii)<br>ASTM F1169-19, sc. 5.7.1 |
| **III.1.A.2 Distance between accessible structural members[6]** | · 50 mm < $D_m$ < 60 mm. | ITX-IP-01[7] |
| **III.1.A.3 Assembly holes[8]** | · h< 5 mm;<br>or<br>· 9.53 mm ≤ h≤ 12 mm ⇔ d < 9.53 mm. | ITX-IP-01[7] |
| **III.1.A.4 Distance between cot base and sides and ends[9,10]** | · 12 mm < $D_{bse}$ < 25 mm. | ITX-IP-01[7] |
| **III.1.A.5 Distance between adjacent slats of the cot base[9]** | · 12 mm < $D_s$ < 25 mm. | ITX-IP-01[7] |
| **III.1.A.6 Distance between the dropside guide rod and bed post** | · $D_{grbp}$ < 7 mm.<br>or<br>· 12 mm < $D_{qrbp}$ < 25 mm. | QB/T 2453.1-1999, 4.4.3 |
| **III.1.A.7 The distance between the floor and the botton rail of the dropside** | · $D_{br}$[11] > 50 mm. | AS NZS 2172-2013, 6.1.f |
| **III.1.A.8 Openings in cot base made of rigid material[12]** | · Assembly holes located in the cot base must comply with section III.1.A.3.<br>· All other holes, gaps, slots or openings located in the cot base:<br>- 12 mm < $O_p$ < 25 mm. | ITX-IP-01[7] |
| **III.1.A.9 Openings in cot base made of metallic mesh[13]** | · 12 mm < $O_p$ < 25 mm. | ITX-IP-01[7] |
| | · $Ø_{wire}$ > 2 mm. | QB/T 2453.2:1999, 5.3.2 |
| **III.1.A.10 Partially bound, V and irregular shaped openings[14]** | · portion B does not enter the opening; or<br>· apex of portion A must contact the base of the opening. | EN 716-2:2017, sc. 5.4.2 |
| | · 50 mm < $A_o$ < 95 mm. | AS/NZS 2172:2013, Appendix A. |
| | · Comply with US safety requirements. | ASTM F1169-19, sc. 7.9 |
| **III.1.A.11 Height between the floor and the upper surface of the cot base[15]** | · $H_{max}$ ≤ 500 mm. (14) | JIS S1103:2014, sc. 8.2 (a).[14] |

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| DIMENSIONAL PARAMETER | INDITEX REQUIREMENT | REGULATION / TEST METHOD |
|---|---|---|
| **III.1.A.12 Height between the floor and the lower surface of sides and ends[16]** | · $D_{brf}$ > 50 mm. | AS/NZS 2172:2013, sc. 6.1 (f).[15] |
| **III.1.A.13 Distance between footholds and the top surface of sides and ends[17]** | · (1) Cots with non-adjustable cot base:<br>- D1 ≥ 660 mm. (18,19)<br>· (2) Cots with adjustable cot base:<br>Cot base in its lowest position:<br>- D1 ≥ 660 mm. (17, 18)<br>Cot base in its highest position:<br>- D2 ≥ 400 mm. (17, 18) | EN 716-2:2017, sc. 5.3.3 |
| | · There must be no footholds between the top surface of the cot base and 660 mm above it.[20] | EN 716-2:2017, scs. 5.3.1 - 5.3.2 |
| | · $D_{trse}$ < 150 mm. (21) | ASTM F1169-19, sc. 5.6.3 |
| **III.1.A.14 Mattress size[22]** | · It is mandatory to supply the mattress.[23] | ASTM F406-19, sc. 5.16.1 |
| | · t ≤ 150 mm. (24) | SOR 2016-152, 22 (a) |
| | · G1 ≤ 25 mm.<br>· G2 ≤ 12,5 mm. | ASTM F406-19, sc. 5.17.2 |

# III.1.B PHYSICAL REQUIREMENTS

## 1 ¿What are they?

Physical requirements, also known as construction requirements, are the characteristics, conditions and properties related to the structural design of the cot.

## 2 ¿Which are the mandatory requirements?

In order to ensure compliance with the requirements established by Inditex, the supplier must review all the parameters listed in the following table, which are applicable to specific parts or components of the cot:

| PHYSICAL PARAMETER | INDITEX REQUIREMENT | REGULATION / TEST METHOD |
|---|---|---|
| **III.1.B.1 Initial stability of the cot** | · No legs of the cot shall lift off the floor. | AS/NZS 2172:2013, Appendix G. |
| | · A minimum of three perimeter support points of the product not in a straight line shall remain in contact with the inclined plane. | ASTM F406-19, sc. 8.17[25] |
| **III.1.B.2 Edges and protruding parts** | · There shall be no hazardous sharp points or edges. Edges, protrusions or sharp points shall comply:<br>- $R_1 \geq 0.5$ mm.<br>- $R_2 \geq 2$ mm.<br>- $x \geq 2$ mm.<br>- $H_p < 5$ mm. | 1) AS/NZS 2172:2013, scs. 6.7 - 6.8[26]<br>2) AS/NZS 8124.1:2013, sc. 5.8[24]<br>3) AS/NZS 8124.1:2013, sc. 5.9[24] |
| | · Tubes: must be protected by a cap that remains in place when tested. | M12.1 Health Canada, sc. 4.17[24] |
| | · $S_{cs}$ [(27)] $< 5$ mm. | ASTM F406-19, sc. 5.14 modified.[28] |
| | · Threaded end of every accessible screw: covered by an acorn nut or a device that offers similar protection. | SOR 2016-152, sc. 15. [(4)] |
| **III.1.B.3 Self-tapping screws & Assembly - Disassembling the cot** | · Self-tapping screws[29]: shall not be used[30] in the assembly of stationary sides, stabilizing bars to cot ends or other components that must be removed by the consumer in the normal disassembly of a cot.<br>· Metal inserts: shall be glued or perfectly affixed.<br>· It must be manufactured so that it can only be assembled correctly one way according to the manufacturer's instructions[31].<br>· Metal threaded fasteners: shall have means to impede loosening or detachment during testing (e.g. lock washers, self-locking nuts, etc.). | 1) ASTM F1169-19, scs. 5.10.1-5.10.5<br>2) SOR 2016-152, sc. 2 |
| **III.1.B.4 Small parts** | · No accessible parts that can be detached shall fit wholly within the small parts cylinder. | 1) ASTM F406-19, sc. 8.21.3<br>2) EN 716-2:2017, sc. 5.5.3 modified.[32] |
| **III.1.B.5 Castors and wheels** | · Possible configurations:<br>a) Two wheels and two support points.<br>b) Four wheels, of which at least two can be locked[33]. | QB/T 2453.2:1999, sc. 5.11 |
| **III.1.B.6 Shear squeeze points during use** | · $S_{sp} < 5$ mm. | EN 716-2:2017, sc. 5.4.1 modified.[34] |
| **III.1.B.7 Snag points[35]** | · The mass shall not be supported by any part accessible from inside the cot[36]. | EN 716-2:2017, sc. 5.10 |
| | · The instrument must not catch on any mechanism, fastener or projection of the cot that is located above the cot base or that protrudes above it[37]. | SOR 2016-152, Schedule 5, sc. 1. |
| | · Neither string on the weight gage shall stay attached to a protrusion. | ASTM F406-19, sc. 8.25 |

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| PHYSICAL PARAMETER | INDITEX REQUIREMENT | REGULATION / TEST METHOD |
|---|---|---|
| **III.1.B.8 Adjustable cot base** | · Only two designated adjustment positions of the cot base shall be permitted. | AS/NZS 2172:2013, sc. 6.1 (b). |
| | · Every cot must be manufactured so that the angle of the cot base does not exceed 7° from the horizontal. | SOR 2016-152, sc. 4.1 |
| | · The cot base shall have a structure such that it can be attached surely as to prevent detaching in use. | PSC Standard Japan, sc. 3. |
| **III.1.B.9 Locking systems**[38,39] | · A system requiring a residual force of at least 50 N (tangential when relevant) or<br>· A system that requires at least two consecutive actions operating on different principles, the second being dependent on the first having been carried out and maintained; or<br>· A system that requires at least two separate but simultaneous actions operating on different principles; or<br>· A system that requires two operating devices separated by a distance of at least 850 mm and required to be operated simultaneously; or<br>· A system that requires the cot base to be lifted to allow folding of the cot.<br>· A system positioned such that it is not accessible to the child within the cot. | EN 716-2:2017, 5.11[40] |
| | · The latching mechanism shall not disengage during the tests and shall continue to function in the intended manner upon completion of the tests. | ASTM F1169-13, 7.3.4 |
| **III.1.B.10 Vertical distance between the cot base and the lower part of the sides and ends of the cot** | · The cot base is in its lowest adjustment position, the lower surface of the bottom rail or panel of each side and end of the cot must be lower than the upper surface of the cot base. | M12.1 Health Canada, sc. 4.12.3.6 |
| **III.1.B.11 Gaps formed between the cot base and the lower part of the sides and ends of the cot** | · It shall not be possible to have holes or gaps[41] located between the upper surface of the cot base and the lower surface of the bottom rail of any side or end of the cot. | ASTM F1169-19, sc. 5.9. |
| **III.1.B.12 Movable sides**[42] | · In the highest position, movable sides shall be provided with a locking system.The locking system shall engage automatically when the movable side the movable side is in the open and closed position.<br>· To avoid entrapment hazards when the movable side is in the lowest position one of the following conditions shall be met:<br>a) The locking system shall fulfil the requirements of III.1.B.20, and shall engage automatically when the movable side is in its lowest position; or<br>b) in its lowest position, the lower component of the movable side is always above the bed base or mattress base. | EN 716-1:2017, 4.4.6.2 |
| **III.1.B.13 Strength of side and end components** | · The slats, bars, spindles, panels, corners, and in general, the sides and ends of the cot, shall neither break nor become detached. Clearances or separations shall not occur[43]. | Order of tests:<br>1) ASTM F1169-19, sc. 7.6.4[44]<br>2) SOR 2016-152, Annex 1[45]<br>3) EN 716-2:2017, sc. 5.8.2[46]<br>4) EN 716-2:2017, sc. 5.8.2[47]<br>5) AS/NZS 2172:2013, Appendix C[48]<br>6) EN 716-2:2017, sc. 5.8.3[49]<br>7) ASTM F1169-19, sc. 7.7[50] |
| **III.1.B.14 Strength of frame and fastenings** | · The sides and ends of the cot, as well as their frames and their assembly screws, shall not suffer fractures, cracks, fissures or disconnection[51]. | Order of tests:<br>1) ASTM F1169-19, sc. 7.2.<br>2) PSC Standard Japan, sc. 19. |
| **III.1.B.15 Rocking or swinging of the cot** | · Not permitted. | EN 716-1:2017, sc. 1. |

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| PHYSICAL PARAMETER | INDITEX REQUIREMENT | REGULATION / TEST METHOD |
|---|---|---|
| **III.1.B.16 Corner posts[52]** | · $H_{cp1} \leq 1.5$ mm. | ASTM F1169-19, sc. 5.4.1. |
| | · $H_{cp2} \leq 5$ mm. | ASTM F1169-19, sc. 5.4.1 modified.[53] |
| | · No corner post shall break, permanently deform or suffer joint failure. No part shall detach. | AS/NZS 2172:2013, Appendix C. |
| **III.1.B.17 Slat construction** | · Lateral joints and transverse joints (finger-joints): Not permitted. | ASTM F1169-19, sc. 5.5. |
| **III.1.B.18 Cords and straps[54]** | · Inside the cot: Not permitted.<br>· Outside the cot[55]: $L_{cs} \leq 188$ mm. | ASTM F1169-19, sc. 7.13. |
| **III.1.B.19 Plastic teething rail[56]** | · The puncture or perforation of the outer material of the cot rim shall not occur. | EN 716-2:2017, sc. 5.6. |
| | · The feeler gage shall not enter any gap created by the deflection or deformation resulting from the application of a vertically downward force. | ASTM F1169-19, sc. 7.1. |
| **III.1.B.20 Final stability of the cot** | · The tests specified in section III.1.B.1 of this standard should be repeated. | 1) AS/NZS 2172:2013, Appendix G.<br>2) ASTM F406-19, sc. 8.17.[23] |

# III.1.C ADDITIONAL SAFETY REQUIREMENTS

## 1 ¿What are they?

The additional safety requirements are the characteristics or safety conditions applicable to cots for domestic use that can not be included within any of the aforementioned categories, this means that they are not related to the dimensional or constructive properties of the product.

## 2 ¿Which are the mandatory requirements

In order to ensure compliance with the requirements established by Inditex, the supplier must review all the parameters listed in the following table, which are applicable to specific parts or components of the cot:

| ADDITIONAL PARAMETERS | INDITEX REQUIREMENT | REGULATION / TEST METHOD |
|---|---|---|
| **III.1.C.1 Materials and surfaces** | The material to be used for the construction of the cribs should be wood or wood-based materials.<br>Wood and wood-based materials must:<br>· be free from decay and insect attack.<br>· be smooth and free of splinters.<br>· not contain defects in wood (loose knots, compression failures, pith or reaction wood, splits, cracks, etc.) that might lead to structural failure.<br>· not contain a moisture content that exceeds 13%. | 1) JIS S1103:2014, sc. 9.1.<br>2) "Method of measuring water content based on the Regulation in Clause 4 (Measuring Water Content) of JIS Z 2101". |
| | · All parts of the cot must meet the requirements of section IV of this standard.<br>· All metal components shall be either made of corrosion-resistant material or be protected from corrosion.<br>· Plastic materials shall be free of sharp edges if it is broken. | Section IV Chemical requirements. |
| **III.1.C.2 Flammability of textiles, coated textiles, plastic coverings and filling materials** | · The maximum rate of spread of flame of textiles, coated textiles or plastic coverings shall be 30 mm/s. | EN 71-2:2011+A1:2014, sc. 5.4. |
| | · There shall be no flammable solids. | 16 CFR 1500.44 |
| | · Any part of a cot that is made of a textile or any other pliable material must have a flame spread time greater than seven seconds in either of the following circumstances:<br>a) it does not have a raised fibre surface; or<br>b) it has a raised fibre surface and, when tested, exhibits ignition or fusion of its base fibres. | Canadian General Standards Board Standard CAN/CGSB - 4.2, Nº. 27.5-2008, entitled Textile Test Methods - Flame Resistance - 45ºAngle Test - One Second Flame Impingement. |
| | · Flammability of textiles, coated textiles, plastic coverings and filling materials of the cot shall comply with the UK regulations. | Furniture and Furnishings (Fire) (Safety) Regulations 1988 No 1324 and amendment 1989 No 2358, the Statutory Instrument 1993 No. 207 and Statutory Instrument 2010 No 2205. |

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| ADDITIONAL PARAMETERS | INDITEX REQUIREMENT | REGULATION / TEST METHOD |
|---|---|---|
| **III.1.C.3 Permanency of labels** | All geographic areas except USA and CANADA:<br>· Labels, statements and warnings shall not be easily removed and shall be easily legible. | AS/NZS 2172:2013, sc. 12.3. |
| | USA:<br>· Warning labels and statements shall be permanent and legible. | 1) ASTM F406-19, sc. 8.18.<br>2) ASTM F406-19, sc. 8.19. |
| | USA:<br>· Non-paper labels shall not liberate small parts. | 3) ASTM F406-19, sc. 8.20. |
| | USA:<br>· Storage pouch or other part with warning statements printed on it shall be permanent. | 4) ASTM F406-19, sc. 8.23. |
| | CANADA:<br>· Labels or storage pouches must be permanently affixed to the cot. | 1) M12.1 Health Canada, sc. 4.5.<br>2) M12.1 Health Canada, sc. 4.6. |
| **III.1.C.4 Entrapment in accessories /Accessories attached to the cot** | · Accessories that attach to or rest on a cot are not permitted. | N/A. |
| **III.1.C.5 Toys included with cot** | · Permitted[57]. | See NOTE [51]. |

# III.2 MINICOTS

## INTRODUCTION

### Generalities

Article is designed to provide sleeping accommodations for an infant up to approximately 5 months in age or when the child begins to push up on hands and knees, whichever comes first. The maximum weight for which the minicot is designed is 9 kg.

The requirements of this standard apply to minicots/rocking minicots for domestic use.

All components of the minicot shall:

- be permanently fixed; or
- require the use of a tool to enable partial or total disassembly; or
- require a series of integrated procedures each of which is dependent on the other for assembly/disassembly[58].
- All joints shall be close fitting.

Before the evaluation inspect the minicot visually for treats, edges or sharp corners and burrs. Tighten all removable connections.

The following requirements shall be fulfilled before and after evaluation: III.2.B.2 (Sharp points and edges).III.2.B.10 (Locking system for unintentional folding - EN 1130:2019).

### General evaluation conditions

- The minicot shall be tested as delivered.
- If the minicot can be assembled, combined or adjusted in different ways, the most adverse combination shall be used for each test and on the same unit. Materials and flammability tests may be carried out on other test samples.
- If the minicot is a knock-down type, it shall be assembled according to the manufacturer's instructions supplied with the minicot.
- Knock-down fittings shall be tightened before testing. Re-tightening during remaining tests shall not take place unless this is specifically required by the manufacturer.
- The evaluations are designed to be applied to minicot that are fully assembled and ready for use, unless otherwise specified, the minicot shall be assembled according to the manufacturer's instructions supplied with the minicot.
- Before starting the evaluation:
  - the minicot shall be stored for at least one week in a standardized atmosphere with a temperature of 23 °C ± 2 °C and the relative humidity (50 ± 5) %.
  - any fabrics used for minicot shall be cleaned or washed twice according the manufacturer's instructions.

  - In case of glued joints,at least 4 weeks in normal indoor conditions shall have elapsed between manufacture and testing.

- The tests shall be carried out under indoor ambient conditions (15 °C to 25 °C).
- The minicot may consist of a body and a frame, in which case they may be balanced (minicot). The body of swinging, balancing or rocking minicot cannot be used without their frame.
- All evaluation shall be conducted on a concrete floor that may be covered with 3-mm thick vinyl flooring cover:
  - The safety requirements cited in this standard do not apply to the electrical elements of the minicots.

# III.2.A DIMENSIONAL REQUIREMENTS

## 1 What are they?

Dimension is the measure of a physical quantity[59] in a given direction and orientation. Consequently, dimensional requirements, also known as dimensions, are the characteristics or metric properties of a particular part or component of the minicot.

## 2 Which are the mandatory requirements?

In order to ensure compliance with the requirements established by Inditex, the supplier shall review all the parameters listed in the following table, which are applicable to specific parts or components of the minicot:

| DIMENSIONAL PARAMETER | INDITEX REQUIREMENT | REGULATION / TEST METHOD |
|---|---|---|
| **III.2.A.1 Minicot dimensions[60]** | · IL< 900 mm.<br>and<br>· 4.000 $cm^2$ < S < 5.500 $cm^2$. | EN 1130:2019, 1<br>SOR 2016-152, 1 |
| **III.2.A.2 Snag points** | · The instrument[61] must not catch on any mechanism, fastener or projection which is located inside the occupant retention area or that protrudes into it. | SOR 2016-152, Schedule 5, section 2. |
| | **Corner post[62]**<br>· Hcp1[63] < 1.5 mm. | ASTM F2194 16$^{\varepsilon 1}$, 5.10 |
| **III.2.A.3 Mattress base angle[64]** | · $\alpha_{mb}$<7°.<br>· Horizontal sleeping position=0°±2°. | EN 1130:2019, 8.4.1.3 |
| **III.2.A.4 Shearing & Crushing hazards** | · Ssu & Sch >12 mm.<br>· Ssu & Sch[65]<5 mm.<br>· Product with powered mechanisms: Ssu & Sch >25 mm. | EN 1130:2019, 8.3.1 |
| **III.2.A.5 Height of sides and ends** | · $D_{sm}$≥300 mm. | GB 30004:2013, 6.5.1 [66] |
| | · Side lower surface must be lower than the upper surface of the mattress support; | SOR 2016-152, 34.a). |
| **III.2.A.6 Openings in the mesh of the sides and ends** | · $A_{hm}$ < 5 mm. | ITX-IP-01[7] |
| **III.2.A.7 Holes** | · 5 mm<h<9,53 ⇔d<minor span dimension across the opening.<br>· 9,53 mm <h<12 mm ⇔d<9,53mm.<br>· h[67]<7mm. | |
| **III.2.A.8 Distance between the frame and the body of the minicot** | · 45 mm < $O_{gae}$ < 65 mm. | |
| **III.2.A.9 Openings between the minicot base and the sides and ends[68]** | · $O_p$<25mm. | |
| **III.2.A.10 Openings in the minicot base** | · $O_{bs}$ <25mm. | |
| **III.2.A.11 Accessible gaps and completely bounded openings** | · 12 mm < $G_{cb}$ <25 mm,<br>or 45 mm< $G_{cb}$ < 65 mm.<br>· $G_{cb}$[69] < 60 mm. | |
| **III.2.A.12 Distance between accessible structural members** | · 45 mm <$D_m$ < Block A.[70] | |
| **III.2.A.13 Fabric sides Enclosed Openings** | · A completely bounded opening shall not be created that allows the complete passage of the torso probe. | |
| **III.2.A.14 Space between guide rod (dropside) and minicot column of lifting side plate** | · $S_{GL}$>5mm.<br>· 12mm> $S_{GL}$ >25mm. | GB 30004:2013, 5.11.6 |

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| DIMENSIONAL PARAMETER | INDITEX REQUIREMENT | REGULATION / TEST METHOD |
|---|---|---|
| **III.2.A.15 Completely bounded openings on the outside of the minicot[71]** | · Completely bounded openings on the outside of the minicot that allow passage of the small head shall also allow the large head probe to pass completely through the opening. | EN 1130:2019, 8.2.4.2.1 |
| **III.2.A.16 Cords, ribbons and similar[72]** | · $L_{cs}$≤188mm.<br>· If D≤80mm⇒L3≤188mm; L4≤188mm; L3+L4+D≤360mm.<br>· Loops (peripheral dimension) ≤360mm.<br>· Monofilament threads shall not be used. | EN 1130:2019, 8.6.2 |
| | · Ropes, threads and other elastic ropes (exclude restraint system) shall meet the relevant requirements of **GB 6675.** | GB 6675. |
| **III.2.A.17 Mattress** | · Thickness[73] ≤38 mm. | GB 30004:2013, 5.13.1 |
| **III.2.A.18 Gaps between mattress and sides and ends[74]** | · $G_1$[75]≤13mm.<br>· $G_2$[76]≤25mm. | ASTM F2194 16$^{\varepsilon 1}$, 6.5.3 |
| **III.2.A.19 Folding or segmented mattress[77]** | · $\alpha_{fsm}$≤10°. | ASTM F2194 16$^{\varepsilon 1}$, 7.8.1 |

# III.2.B PHYSICAL REQUIREMENTS

## 1 What are they?

Physical requirements, also known as construction requirements, are the characteristics, conditions and properties related to the structural design of the minicot.

## 2 Which are the mandatory requirements?

In order to ensure compliance with the requirements established by Inditex, the supplier must review all the parameters listed in the following table, which are applicable to specific parts or components of the minicot:

| PHYSICAL PARAMETER | INDITEX REQUIREMENT | REGULATION / TEST METHOD |
|---|---|---|
| **III.2.B.1 Restraint system** | · A minicot must not have a child restraint system. | SOR 2016-152, 18 |
| **III.2.B.2 Sharp points and edges** | · $R_1 > 2$ mm.[78]<br>· $R_2 > 0.5$ mm. | GB 30004:2013, 6.4 |
| | · There shall be no hazardous sharp points or edges. | 16 CFR 1500.48 16 CFR 1500.49 |
| | · Metal tubing.<br>· Every cut edge of any metal tubing must meet one of the following requirements if the tubing is located above the mattress support when the mattress support is in any position and is accessible to the child:<br>a) it must be smoothly finished to eliminate sharp edges and points; or<br>b) it must be protected by a cap that remains in place when it is subjected to a force of 90 N applied in any direction. | SOR 2016-152, 3<br>(M12.2-2012, 4.15). |
| **III.2.B.3 Coil springs** | · Every coil spring of a minicot is located above the mattress support when the mattress support is in any position and is accessible to the child must be covered or manufactured so as to prevent injury to the child. | SOR 2016-152, 21<br>M12.2-2012, 4.14 |
| **III.2.B.4 Connecting screws**[79] | · Connecting screws for direct fastening, e.g. self-tapping screws, shall not be used for the assembly of any component that is designed to be removed or loosened when dismantling the minicot for purposes of transportation or storage. | EN 1130:2019, 8.11.1 |
| | · The threaded end of every bolt must, if the end is located above the mattress support when the mattress support is in any position and is accessible to the child, be covered by an acorn nut or a device that offers equivalent protection. | M12.2 2012, 4.13 |
| **III.2.B.5 Small parts** | · There shall be no small parts as defined in 16 CFR 1501. | 16 CFR 1501[80] |
| | · Any component that is considered capable of being gripped[81] by a child shall be tested and if it is removed shall not fit entirely within the small parts cylinder. | EN 1130:2019, 8.7.2.2[82]<br>EN 1130:2019, 8.7.2.3[83] |
| **III.2.B.6 Deflection of the mattress base** | · Hmd< 40 mm. | EN 1130:2019, 8.8.1.2 |

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| PHYSICAL PARAMETER | INDITEX REQUIREMENT | REGULATION / TEST METHOD |
|---|---|---|
| **III.2.B.7 Structural integrity** | **Static Strength**<br>· Requirements of sections, III.2.C.1,III.2.B.2, III.2.A.4, III.2.B.10,III.2.A.7,III.2.C.3, III.2.B.4,III.2.C.4, Shall be fulfilled and its function shall be unimpaired.<br>· Any part of base shall be free from cracking, the base shall be free from shedding, and no structural distress of minicot | SOR 2016-152, sc 5, sch 8. |
| | **Mattress support**<br>· The mattress support must not dislodge, its mechanisms must not disengage or become permanently deformed and its fasteners must not loosen. | SOR 2016-152, sc 2, sch 9.[84] |
| | **Dynamic test**<br>· The product must not exhibit any damage, its latching or locking mechanisms must not disengage or become permanently deformed and its fasteners must not loosen.<br>· The product shall not fold or collapse. | SOR 2016-152, sc 4, sch 8.[85] |
| | **Strength sides, ends and corners**<br>· There shall be no break nor permanent deformation of any part of the product that can impair its safe function.<br>· The slats must not turn or dislodge or become deformed or otherwise damage. | GB 30004:2013, 6.9[86]<br>SOR 2016-152, sc 1, sec 8.[87]<br>EN 1130:2019, 8.11.3.3.2[88]<br>EN 1130:2019, 8.11.3.3.3[89] |
| | **Strength mesh sides**<br>· Any mesh that is made of a textile or other pliable material and that forms part of the sides, shall not tear or become detached from its supporting structure or anything to which it is attached. | SOR 2016-152, sc 12(1), sch 3.[90] |
| | **Vertical static Load**<br>· There shall be no break nor permanent deformation of any part of the product that can impair its safe function. | GB 30004:2013, 6.11 |
| **III.2.B.8 Stability** | **Minicot (no rocking or swinging feature)**<br>No legs or feet of the minicot shall lift of the floor.<br>· If Cs[91]>7200. EN 1130:2019, 8.5.4 must be applied.<br>· If Cs[92]<7200, ASTM F2194 16$^{\varepsilon 1}$, 7.4, must be applied. | EN 1130:2019, 8.5.4<br>ASTM F2194 16$^{\varepsilon 1}$ ,7.4 |
| | **Rocking minicot** | EN 1130:2019, 8.5.4<br>ASTM F2194 16$^{\varepsilon 1}$, 7.4 |
| **III.2.B.9 Rocking locking system** | · The minicot shall not be swung or vibrated by electrical or mechanical power but may be pushed or pulled by hand directly. | GB 30004:2013, 5.7 |
| | · The locking device shall not become disengaged. | EN 1130:2019, 8.4.1.2 |
| | · The required force of unlock the locking device shall be greater than 50 N. | GB 30004:2013, 6.13 |

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| PHYSICAL PARAMETER | INDITEX REQUIREMENT | REGULATION / TEST METHOD |
|---|---|---|
| **III.2.B.10 Locking system for unintentional folding[93]** | After assembling, at least one locking mechanism may be operated automatically, and the following parts shall be provided in its structure.<br>The minicot shall be equipped with a locking system fulfilling one of the following conditions:<br>· To be released, The locking system requires at least two consecutive actions operating on different principles, the second being dependent on the first having been carried out and maintained;<br>· To be released, The locking system requires at least two separate but simultaneous actions operating on different principles;<br>· The minicot base is required to be lifted to allow folding of the minicot;<br>· Use of a tool is necessary to fold the minicot. | EN 1130:2019, 8.4.3.1 |
| | · The locking system shall have a residual force of at least 50 N (tangential when relevant) for operation; | EN 1130:2019, 8.3.3.2[92] |
| | · The locking mechanism for inward folded minicots requires at least two mechanism. If the weight of infant on the base get a positive locking effect will be equivalent to two-locking mechanism. | GB 30004:2013, 5.9 |
| **III.2.B.11 Locking system of adjustable sides** | Locking systems for adjustable sides shall consist of:<br>· A system that requires at least two separate but simultaneous actions operating on different principles; or<br>· A system that requires at least two consecutive actions operating on different principles, the operation of the second being dependent on the first having been carried out and maintained; or<br>· A system that requires at least 2 independent simultaneous actions.<br>· A system requiring a force of at least 50 N. | EN 1130:2019, 8.5.2.2[94] |
| **III.2.B.12 Locking system for adjustment in height or angle of the base[95]** | To prevent inadvertence release, the locking systems used for securing the base when adjusting its height or angle shall consist of:<br>· a system that requires at least two separate but simultaneous actions operating on different principles; or<br>· a system that requires at least two consecutive actions operating on different principles, the operation of the second being dependent on the first having been carried out and maintained; or<br>· a system requiring a force of at least 50 N with the test mass[96] inside the product; or<br>· the use of a tool to adjust the height. | EN 1130:2019, 8.5.3.2[97] |
| **III.2.B.13 Castors and rollers** | · If castors/wheels are fitted, they shall be lockable, and they shall not unlock. | EN 1130:2019, 8.4.4.2 |
| **III.2.B.14 Mattress** | · Verification shall be provided that mattress bases and mattresses provided with the crib fulfil the requirements of EN 16890:2017. | EN 1130:2019, 9 |
| | · Each product shall be sold with the mattress included. | ASTM F2194 16ε1, 6.5 |
| | · The mattress must be stitched using lock stitching. | SOR 2016-152, 22c. |
| | · The stitching shall not unravel. | M12.2 2012, 4.11 |

# III.2.C ADDITIONAL SAFETY REQUIREMENTS

## 1 What are they?

The additional safety requirements are the characteristics or safety conditions applicable to minicots for domestic use that can not be included within any of the aforementioned categories, this means that they are not related to the dimensional or constructive properties of the product.

## 2 Which are the mandatory requirements

In order to ensure compliance with the requirements established by Inditex, the supplier must review all the parameters listed in the following table, which are applicable to specific parts or components of the minicot:

| ADDITIONAL PARAMENTERS | INDITEX REQUIREMENT | REGULATION/ TEST METHOD |
|---|---|---|
| **III.2.C.1 Materials** | · All parts of the minicot must meet the requirements of the chemical requirements for child care furniture. | Section IV Chemical requirements. |
| **III.2.C.2 Thermal hazards** | · Any part of the minicot that is made of a textile or any other pliable material must have a flame spread time greater than seven seconds, as amended from time to time, in either of the following circumstances:<br>a) it does not have a raised fibre surface; or<br>b) it has a raised fibre surface and, when tested, exhibits ignition or fusion of its base fibres. | Canadian General Standards Board standard CAN/CGSB-4.2 No. 27.5, entitled Textile Test Methods: Flame Resistance — 45° Angle Test One-Second Flame Impingement. |
| | · The propagation speed of the coating flame should not exceed 30 mm/s There should be no flashing on the surface. | CNS 15911 Appendix A |
| | · Flaming or progressive smouldering of the upholstery components should not occur. | UK Furniture and Furnishings (Fire) (Safety) Regulations 1988, Statutory Instrument No. 1324 (as amended). |
| | · Verification shall be provided that there is no surface flash, and the maximum rate of spread of flame of textiles, coated textiles or plastic coverings used in the product is 50 mm/s. | EN 71-2:2011+A1:2014, 5.4 |
| | · Flammability of the materials used for minicots shall be tested in accordance with the methods specified in GB 6675. | GB 30004:2013, 6.2.4 |
| **III.2.C.3 Label** | · Warning labels (whether paper or non-paper) shall be permanent. | ASTM F2194 16$^{\varepsilon 1}$, 7.2.1-7.2.3 |
| | · Non-paper labels shall not liberate small parts. | ASTM F2194 16$^{\varepsilon 1}$, 7.2.5 |
| | · Warning statements applied directly onto the surface of the product by hot stamping, heat transfer, printing, wood burning, etc. shall be permanent. | ASTM F2194 16$^{\varepsilon 1}$, 7.2.4.1-7.2.4.3 |
| **III.2.C.4 Toys** | · Permitted. | Inditex requirement.[98] |

# III.3 CARRYCOTS

## INTRODUCTION

### Generalities

Children's carrycots are for children who cannot sit unaided, roll over or push up on its hands and knees, with a maximum weight of 9 kg. whichever comes first.

The requirements set out in this standard, apply to a carrycot assembled and erected in accordance with the manufacturer´s instructions.

The following requirements shall be fulfilled before and after evaluation: III.3.B.10 (Sharp points and edges).

The following requirements shall be fulfilled after evaluation: III.3.B.4 (Folding mechanism of stands) III.3.B.13 (Structural integrity-static strength).

### General test conditions

In the event that testing is required, the carrycot shall be tested as delivered considering the following conditions:

- All evaluation shall be conducted on a concrete floor that may be covered with 3-mm thick vinyl flooring cover, unless the test instructs differently.
- The product shall be completely assembled, unless otherwise noted, in accordance with the manufacturer's instructions.
- No testing shall be conducted within 48 h of manufacturing.
- The product to be tested shall be in a room with ambient temperature of 23 ± 5 ºC for at least 1 h prior to testing. Testing then shall be conducted within this temperature range.
- Any fabric intended to be washed/cleaned shall be washed/cleaned and dried twice in accordance with the manufacturer's instructions.
- Any resulting shrinkage shall not prevent the fabric from being refitted without damaging the seams of the fabric or impairing the performance of the carry cot.

# III.3.A DIMENSIONAL REQUIREMENTS

## 1 What are they?

Dimension is the measure of a physical quantity[99] in a given direction and orientation. Consequently, dimensional requirements, also known as dimensions, are the characteristics or metric properties of a particular part or component of the carrycot.

## 2 Which are the mandatory requirements?

In order to ensure compliance with the requirements established by Inditex, the supplier must review all the parameters listed in the following table, which are applicable to specific parts or components of the carrycot:

| DIMENSIONAL PARAMETER | INDITEX REQUIREMENT | REGULATION / TEST METHOD |
|---|---|---|
| **III.3.A.1 Carrycot dimension** | · $S \leq 4.000\ cm^2$. | SOR 2016-152, 1 |
| **III.3.A.2 Internal height** | Every side of a carrycot must meet the following requirements when the mattress support is in any position:<br>· its lower surface must be lower than the upper surface of the mattress support;<br>· its upper surface must be at least 230 mm higher than the upper surface of the mattress support. | SOR 2016-152, 39 |
| | **Non-rigid sides carrycot**[100]<br>· The test mass shall not roll out of the carry cot. Effectiveness of the retaining function of the ends of non-rigid carrycots.<br>· The test sphere shall not fall out of the carrycot. | EN 1466:2014, 7.1.2.3.2<br>EN 1466:2014, 7.1.2.4.2 |
| **III.3.A.3 Overall height of a carry cot with flexible handles** | · $H_{fh} < 520$ mm. | EN 1466:2014, 7.1.2.4.2 |
| **III.3.A.4 Mattress base and stand support angle** | · $\alpha_{max} < 7°$. | SOR 2016-152, 4 1-2[101]<br>ASTM F2194 16$^{\varepsilon 1}$ , 7.10[102] |
| **III.3.A.5 Openings in the mesh of the sides and ends** | · $A_{hm} < 6.3$ mm. | SOR 2016-152, sc 2, sch 4 |
| **III.3.A.6 Holes** | · 9,53 mm<h<12 mm⇔d< 9,53 mm.<br>· 5.33 mm<h<9,53 mm⇔d< minor span dimension across the opening.<br>· Op < 65 mm. | ITX-IP-01 |
| **III.3.A.7 Distance for any adjacent slat** | · $D_m <$ Block A[103] (60x100x100 mm). | |
| **III.3.A.8 Openings attachment of the handles** | · Oh < 65 mm. | EN 1466:2014, 7.2.2 |
| **III.3.A.9 Fabric sides Enclosed Openings** | · A completely bounded opening shall not be created that allows the complete passage of the torso probe. | ASTM F2194 16$^{\varepsilon 1}$ , 7.9 |
| **III.3.A.10 Shearing hazards**[104] | · $S_{su}$ & $S_{ch}$ >12mm or $S_{su}$ & $S_{ch}$[105]<5mm.<br>· During setting up: (Product with powered mechanisms).<br>$S_{su}$ & $S_{ch}$ >18mm. | EN 1466:2014, 7.7 |
| **III.3.A.11 Cords and straps**[106] | · $L_{cs} \leq 188$mm.<br>· If D≤80mm⇒L3≤188mm; L4≤188mm; L3+L4+D≤360mm.<br>· Loops (peripheral dimension) ≤360mm The ends of any cords, straps, ribbons and other narrow materials shall be turned in or sealed or protected from fraying. | EN 1466:2014, 7.4.3 |

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| DIMENSIONAL PARAMETER | INDITEX REQUIREMENT | REGULATION / TEST METHOD |
|---|---|---|
| **III.3.A.12 Snag points** | · Corner post[107] $H_{cp1}$[108] < 1.5 mm. | ASTM F2194 16$^{\varepsilon 1}$ , 5.10 |
| | · The instrument[109] must not catch on any mechanism, fastener or projection which is located inside the occupant retention area or that protrudes into it. | SOR 2016-152, Schedule 5, section 2. |
| **III.3.A.13 Mattress** | · Thickness[110] ≤38 mm. | ASTM F2194 16$^{\varepsilon 1}$, 6.5.1 |
| **III.3.A.14 Gaps between mattress and sides and ends[111]** | · $G_1$[112]≤13mm.<br>· $G_2$[113]≤25mm. | ASTM F2194 16$^{\varepsilon 1}$, 6.5.3 |
| **III.3.A.15 Folding or segmented mattress[114]** | · $\alpha_{fsm}$≤10°. | ASTM F2194 16$^{\varepsilon 1}$, 7.8.1 |

# III.3.B PHYSICAL REQUIREMENTS

## 1 What are they?

Physical requirements, also known as construction requirements, are the characteristics, conditions and properties related to the structural design of the carrycot.

## 2 Which are the mandatory requirements?

In order to ensure compliance with the requirements established by Inditex, the supplier must review all the parameters listed in the following table, which are applicable to specific parts or components of the carrycot:

| PHYSICAL PARAMETER | INDITEX REQUIREMENT | REGULATION / TEST METHOD |
|---|---|---|
| **III.3.B.1 Restraint system** | · A carrycot must not have a child restraint system. | SOR 2016-152, 18 |
| **III.3.B.2 Castor and wheels** | · The stand shall not be fitted with wheels or castors. | EN 1466:2014, 7.1.3 |
| **III.3.B.3 Locking system for unintentional folding** | A folding carrycot must have a latching or locking mechanism that meets all of the following requirements:<br>· it latches or locks automatically;<br>· it requires two separate, deliberate and simultaneous actions to unlatch or unlock it. | SOR 2016-152, 41 |
| **III.3.B.4 Folding mechanisms of stands** | · The stand shall not collapse.<br>· Any locking mechanism for the folding mechanism shall continue to operate satisfactorily. | EN 1466:2014, 7.9.4.2 |
| **III.3.B.5 Locking system of Adjustable sides** | · The movable part of an access side of a carrycot must be held in each of its adjustment positions by means of a mechanism that latches or locks automatically and that requires two separate, deliberate and simultaneous actions to unlatch or unlock it. | SOR 2016-152, 40 |
| **III.3.B.6 Stability** | · A product in all manufacturer's recommended use positions, including positions where the locks are engaged for preventing rocking/swinging motion of the sleeping surface, shall not tip over and shall retain the CAMI dummy. | ASTM F2194 16ε1, 7.4<br>EN 1466:2014, 7.8 |
| **III.3.B.7 Small parts** | · There shall be no small parts as defined in 16 CFR 1501 before evaluation or liberated as a result of testing.<br>· Any component or part of a component within the protected volume that is removed, whether intended to be removed without the use of a tool or not, shall not fit entirely within the small parts cylinder in any orientation without compression.[115] | 16 CFR 1501<br>EN 1466:2014, 7.5.2 |

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| PHYSICAL PARAMETER | INDITEX REQUIREMENT | REGULATION / TEST METHOD |
|---|---|---|
| **III.3.B.8 Suffocation hazards** | **Internal lining**<br>· To avoid chocking or suffocation, any plastic internal lining within the protected volume shall have a minimum thickness of 0,2 mm. | EN 1466:2014, 7.6.1 |
| | **Plastic packaging**<br>Plastic bags and plastic sheeting used for packaging shall conform to one of the following requirements:<br>· The bags made of flexible plastics with an opening perimeter greater than 360 mm used for external or internal packaging or plastic sheeting used for packaging, shall have an average sheet thickness of 0,038 mm or more when measured in accordance with EN 71-1 and shall not have a drawstring or cord as a means of closing; or<br>· The bags made of perforated sheets or perforated plastic sheeting with an average thickness of less than 0,038 mm when measured in accordance with EN 71-1 and of an area greater than 100 mm × 100 mm shall be perforated with defined holes so that a minimum of 1 % of the area has been removed over any area of 30 mm × 30 mm; or<br>· Any plastic covering used as packaging that does not fulfil the previous requirements shall be conspicuously marked in the official language (s) of the country where the product is sold with a statement to indicate that any plastic cover should be removed, destroyed or kept away from children to avoid suffocation hazard.<br>· Shrunk-on films that are destroyed when the packaging is opened by the user are excluded from these requirements. | EN 1466:2014, 7.6.2 |
| | **Filling materials**<br>· To avoid choking filling materials shall be completely covered and retained. This shall be assessed by visual inspection. | EN 1466:2014, 7.6.3 |
| **III.3.B.9 Hazards due to the softness of the base** | · The angle of the test plate shall never be less than 150°. | ITX-IP-01 |
| **III.3.B.10 Sharp points and edges** | · There shall be no hazardous sharp points or edges. | 16 CFR 1500.48<br>16 CFR 1500.49 |
| | **Metal tubing**<br>Every cut edge of any metal tubing must meet one of the following requirements if the tubing is located above the mattress support when the mattress support is in any position and is accessible to the child:<br>· it must be smoothly finished to eliminate sharp edges and points; or<br>· it must be protected by a cap that remains in place when it is subjected to a force of 90 N applied in any direction. | SOR 2016-152, 15.3<br>(M 12.3 2012, 4.14) |
| | · Filling materials shall not contain any sharp objects. | EN 1466:2014, 7.6.3 |
| **III.3.B.11 Exposed Coil Springs** | · Coils springs shall be covered or otherwise designed to prevent injury from entrapment. | F2050 – 13a 7.2.2<br>F2050 – 13a 7.2.3 |
| **III.3.B.12 Connecting screws** | **Fasteners**<br>· Woodscrews shall not be used in the assembly of any components that must be removed by the consumer in the normal disassembly of a carrycot/cradle. | ASTM F2194 16$^{\varepsilon 1}$, 5.9 |
| | **Bolts**<br>· The threaded end of every bolt of a carrycot must, if the end is located above the mattress support when the mattress support is in any position and is accessible to the child, be covered by an acorn nut or a device that offers equivalent protection. | SOR 2016-152, 15.4 |

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| PHYSICAL PARAMETER | INDITEX REQUIREMENT | REGULATION / TEST METHOD |
|---|---|---|
| **III.3.B.13 Structural integrity** | **Flexible handles carry cots**[116]<br>· The attachment points or the top of the maintaining device shall be located in a position which is at least three quarters of the height of the carry cot, measured on the outside from the base.<br>· Flexible handles shall show no signs of damage. | EN 1466:2014, 7.9.1.2 |
| | **Static strength**<br>· A carrycot must not exhibit any damage.<br>· it prevents the bassinet from folding up or collapsing. | SOR 2016-152, sc 5, sch 8 |
| | · The carry cot shall still comply with III.3.B.9 | EN 1466:2014, 7.9.2.2.1[117] |
| | **Dynamic strength**<br>· No damage shall be observed in any part of the carry cot which shall continue to function as intended. | EN 1466:2014, 7.9.2.2.2 |
| | **Strength of stands**<br>· The stand shall not break or suffer any permanent deformation which will prevent its normal operation. | EN 1466:2014, 7.9.3.2 |
| | **Folding mechanisms of stands**<br>· The stand shall not collapse. Any locking mechanism for the folding mechanism shall continue to operate satisfactorily. | EN 1466:2014, 7.9.4.2 |
| **III.3.B.14 Carrycot attachment to base/stand** | Any product containing a removable carrycot bed with a latching or locking device intended to secure the removable carrycot bed to the base/stand shall comply with at least one of the following:<br>· The base/stand shall not support the removable carrycot bed (that is, the removable carrycot bed falls from the base/stand and contacts the floor or the base/stand collapses when the removable carrycot bed is not locked into the base/stand).<br>· The lock/latch shall automatically engage under the weight of the removable carrycot bed (without any other force or action) in all lateral positions.<br>· The sleep surface of the removable carrycot bed shall be at an angle of at least 20° from a horizontal plane when the removable carrycot bed is in an unlocked position.<br>· The removable carrycot bed or base stand, or both, shall provide a false latch/lock visual indicator(s) that are at a minimum visible from both of the long sides of the product. A visual indicator(s) shall be visible to a person standing at each of the long sides of the product but not necessarily visible from all other positions around the product.<br>· The removable carrycot bed shall not tip over and shall retain the CAMI[118] new-born dummy. | ASTM F2194 16$^{\varepsilon 1}$, 7.12 |
| **III.3.B.15 Strength sides, ends and corners of slats** | · The slats of a side of a carrycot must not turn or dislodge or become deformed or otherwise damaged. | SOR 2016-152, sc 8, sch 1. |
| **III.3.B.16 Strength and integrity of mesh** | · Any mesh that is made of a textile or other pliable material and that forms part of the sides or bottom of carrycot must not, tear or become detached from its supporting structure or anything to which it is attached. | SOR 2016-152, sc 1, sch 12. |

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| PHYSICAL PARAMETER | INDITEX REQUIREMENT | REGULATION / TEST METHOD |
|---|---|---|
| **III.3.B.17 Slip Resistance** | **Test Surface:**<br>· The surface used to test slippage shall be an impregnated high-pressure laminate of unspecified colour with a smooth matte finish.<br>· The laminate shall be mounted on a flat surface, with a thickness no less than 19 mm, in accordance with the laminate manufacturer's instruction.<br>· Use of any products that will interfere with the performance of the laminate, that is, solvents or cleaners that leave residue or alter the surface finish is unacceptable.<br>· Precautions should be taken to prevent the contamination of the testing surface. Graduation or pencil marks are unacceptable unless located in a position that never interferes with the performance of the test product, that is, along the edge of the surface. | F2050 – 13a, 3.2 |
| **III.3.B.18 Mattress** | · The mattress must be stitched using lock stitching.[119] | SOR 2016-152, 22c |
| | · The stitching shall not unravel. | M12.2 2012, 4.11 |
| | · Each product shall be sold with the mattress. | ASTM F2194 16$^{\varepsilon 1}$, 6.5 |

# III.3.C ADDITIONAL SAFETY REQUIREMENTS

## 1 What are they?

The additional safety requirements are the characteristics or safety conditions applicable to carrycots for domestic use that can not be included within any of the aforementioned categories, this means that they are not related to the dimensional or constructive properties of the product.

## 2 Which are the mandatory requirements

In order to ensure compliance with the requirements established by Inditex, the supplier must review all the parameters listed in the following table, which are applicable to specific parts or components of the carrycot:

| ADDITIONAL PARAMETERS | INDITEX REQUIREMENT | REGULATION / TEST METHOD |
|---|---|---|
| **III.3.C.1 Label** | · Warning labels (whether paper or non-paper) shall be permanent. | ASTM F2194 16$^{\varepsilon 1}$, 7.2.1-7.2.3 |
| | · Warning statements applied directly onto the surface of the product by hot stamping, heat transfer, printing, wood burning, etc. shall be permanent. | ASTM F2194 16$^{\varepsilon 1}$, 7.2.4-1-7.2.4.3 |
| | · Non-paper labels shall not liberate small parts. | ASTM F2194 16$^{\varepsilon 1}$, 7.2.5 |
| **III.3.C.2 Toys** | · Permitted. | See note[120]. |
| **III.3.C.3 Materials** | · All parts of the carry cots must meet the requirements of the chemical requirements for child care furniture. | Section IV Chemical requirements. |
| **III.3.C.4 Thermal hazards** | · Any part of a carrycot or stand that is made of a textile or any other pliable material must have a flame spread time greater than seven seconds, in either of the following circumstances:<br>- it does not have a raised fibre surface; or<br>- it has a raised fibre surface and, when tested, exhibits ignition or fusion of its base fibres. | Canadian General.<br>Standards Board standard CAN/ CGSB-4.2 No. 27.5,<br>entitled Textile Test Methods: Flame Resistance — 45°.<br>Angle Test — One-Second Flame Impingement. |
| | · There shall be no surface flash. | EN 71-2:2011+A1:2014, 5.4 |
| | · Flaming or progressive smouldering of the upholstery components should not occur. | UK Furniture and Furnishings (Fire) (Safety) Regulations 1988, Statutory Instrument No. 1324 (as amended). |

# III.4 HIGH CHAIRS

## INTRODUCTION

### Generalities

Children's high chairs are for children up to 3 years of age and up to 15 kg, who are capable of sitting unaided. When a chair is convertible to other purposes, these additional functions are not covered by this standard.

The requirements set out in this standard, apply to a high chair assembled and erected in accordance with the manufacturer´s instructions. If parts of the high chair are designed to be removable (e.g a tray or a footrest), the requirements apply to the high chair with and without this part(s).

For products to be sold as a high chair, all components necessary for a high chair to comply with the requirements of this standard must be included when shipped from the manufacturer in the package with the product or one of the packages if multiple packages are used.

For high chair conversion kits sold separately or included with a product to convert a product into a high chair, all components necessary to comply with this standard must be included when shipped from the manufacturer in the package with the product or the conversion kit, or both, or one of the packages if multiple packages are used.

The following requirements shall be fulfilled before and after evaluation: III.4.B.1 Folding high chairs (Unintentional folding), III.4.B.2 Seat height adjustment (Unintentional release of the adjustment mechanism), III.4.B.6 Small parts.

### General test conditions

In the event that testing is required, the following conditions shall be considered before evaluation:

- All testing shall be conducted on a concrete floor that may be covered with 3mm thick vinyl flooring cover, unless test instructs differently.
- Knock-down fittings shall be tightened. Further re-tightening shall not take place.
- The chair shall be stored for at least one week in a standardized atmosphere with a temperature of 23 °C ± 2 °C and a relative humidity or (50 ± 5).
- Time elapsed between manufacturing and evaluation in case of glued joints in timber and the like shall be greater than four weeks in normal indoor conditions.
- If the high chair is a knock-down type, it shall be assembled according to the instructions supplied with it.
- If the instructions allow for different adjustments or configurations of components (e.g. inclination of the backrest, height of the seat, position of the tray, etc.), the most onerous combination shall be used, unless otherwise specified.
- The high chair with any accessory(s) included or any accessories sold by the manufacturer of the high chair for use with the specific high chair model being evaluated shall, when installed in a manufacturer's recommended use position in accordance with the manufacturer's instructions, comply with the requirements of this standard.

# III.4.A DIMENSIONAL REQUIREMENTS

## 1 What are they?

Dimension is the measure of a physical quantity[121] in a given direction and orientation. Consequently, dimensional requirements, also known as dimensions, are the characteristics or metric properties of a particular part or component of the high chair.

## 2 Which are the mandatory requirements?

In order to ensure compliance with the requirements established by Inditex, the supplier must review all the parameters listed in the following table, which are applicable to specific parts or components of the high chair:

| DIMENSIONAL PARAMETER | INDITEX REQUIREMENT | REGULATION / TEST METHOD |
|---|---|---|
| **III.4.A.1 Holes, gaps and openings** | · 5,33>h>12 mm.<br>· 5,33<h<12 mm⇔d<9,53 mm. | ITX-IP-01 |
| | · There shall be no holes, gaps or openings above the seat surface which allow the small torso probe[122] to pass through.[123] | EN 14988:2017, 8.3.2.2. |
| **III.4.A.2 Active restraint system** | **Active crotch restraint**[124]<br>· The test gauge shall touch the crotch restraint. | AS 4684-2009, APPENDIX A. |
| | **Lateral protection**<br>· $H_{LP}$≥140 mm.<br>· $L_{LP}$≥150 mm. | EN 14988:2017, 8.9.2.4.1[125]<br>EN 14988:2017, 8.9.2.4.2[126] |
| **III.4.A.3 Passive restraint system** | **Passive crotch restraint**<br>· $D_{pcr}$<216mm. | EN 14988:2017, 8.9.1.2.6 |
| | **Front torso support**<br>· $D_{fts}$<250mm. | EN 14988:2017, 8.9.1.2.7 |
| | **Lateral protection**<br>· $H_{LP}$≥140 mm.<br>· The lateral protections shall extend up to the horizontal component in front of the torso of the child. | EN 14988:2017, 8.9.2.4.1[125]<br>EN 14988:2017, 8.9.2.3 |
| **III.4.A.4 Back rest and reclinable back rest** | · $L_{BR}$≥250mm.<br>· $A_{BR}$[127]<60°⇒$L_{BR}$≥400mm. | EN 14988:2017, 8.9.3.2.1 |
| | · 65°<$A_{BR}$[128]<75°. | ISO 9221-2:2015, 6.10.1 |

# III.4.B PHYSICAL REQUIREMENTS

## 1 What are they?

Physical requirements, also known as construction requirements, are the characteristics, conditions and properties related to the structural design of the high chair.

## 2 Which are the mandatory requirements?

In order to ensure compliance with the requirements established by Inditex, the supplier must review all the parameters listed in the following table, which are applicable to specific parts or components of the high chair:

| PHYSICAL PARAMETER | INDITEX REQUIREMENT | REGULATION / TEST METHOD |
|---|---|---|
| **III.4.B.1 Folding high chairs** | **Incomplete deployment**<br>· The high chair shall fulfil one of the following:<br>a) the weight of the child in the high chair shall act to prevent the folding; or<br>b) at least one locking device shall engage automatically, when the product is ready for use. | EN 14988:2017, 8.1.1.2 |
| | **Unintentional folding**<br>· One of the following requirements shall be met:<br>a) at least one operating device requires a minimum force of 50 N to activate, with and without test mass A[129] on the seat, or<br>b) folding is only possible if at least one locking mechanism requires the use of a tool, or<br>c) folding is only possible, when two independent operating devices are operated simultaneously, or<br>d) there are two or more automatically engaging locking devices that both cannot be released by one single action, or<br>e) folding of the high chair requires two consecutive actions, the first of which shall be maintained while the second is carried out. | EN 14988:2017, 8.1.2.1 |
| | **Latching or Locking Mechanisms**<br>· Any unit that folds shall have a latching or locking device or other provision in a design that will prevent the unit from unintentionally folding.<br>· The unit shall remain in its manufacturer's recommended use position.<br>If a unit is designed with a latching or locking device, that device shall remain engaged and operative. | ASTM F404-18, 7.1<br>GB/T 22793.2-2008, 5.7 |
| **III.4.B.2 Seat height adjustment[130]** | · There shall be locking mechanism(s) to prevent the seat unit of a high chair from moving from a higher to a lower position. | EN 14988:2017, 8.2.1 |
| | **Incomplete adjustment**<br>· At least one locking device shall engage automatically when the seat is adjusted in height. | EN 14988:2017, 8.2.2 |
| | **Unintentional release of the adjustment mechanism**<br>· The requirements of the section III.4.B.1 Unintentional folding of the high chair shall be fulfilled. | EN 14988:2017, 8.1.2.1 |
| **III.4.B.3 Lateral protection** | · The high chair shall be fitted with lateral protection that complies with section III.4.A.2 and III.4.A.3. | EN 14988:2017, 8.9.2.1 |
| | · Openings in the lateral protection and between the lateral protection and the backrest are allowed, provided that they comply with the equirements of section III.4.A.1. | EN 14988:2017, 8.9.2.2<br>EN 14988:2017, 8.9.2.3 |

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| PHYSICAL PARAMETER | INDITEX REQUIREMENT | REGULATION / TEST METHOD |
|---|---|---|
| **III.4.B.4 Compression and shearing points**[131] | **Shear and squeeze points when setting up and folding away.**<br>· Permitted if they are not under the influence of a powered mechanism. | ISO 9221-1:2015, 5.3.1 |
| | **Shear and squeeze points under the influence of powered mechanism.**<br>· $S_{SP}$>18[132] | ISO 9221-2:2015, 6.6.1 |
| | **Shear and squeeze points under the influence of body weight or other external forces.**<br>· $S_{SP}$>12mm. | ISO 9221-2:2015, 6.6.2[133] |
| **III.4.B.5 Entanglement hazards**[134,135] | **Cords, ribbons and similar parts.**<br>· $L_{cs}$≤220mm.<br>· If D>80mm⇒L1≤220mm; L2≤220mm.<br>· If D≤80mm⇒L3≤220mm; L4≤220mm; L3+L4+D≤360mm.<br>· Loops (peripheral dimension) ≤360mm.<br>· Monofilament threads shall not be used. | EN 14988:2017, 8.5.2 |
| **III.4.B.6 Small parts** | · There shall be no small parts[136] before or liberated as a result of evaluation to this specification. | ASTM F404-18, 5.7, 16 CFR 1501 |
| | · Any component or part of a component that is removed shall not fit entirely within the small parts cylinder.[137] | ASTM F404-18, 7.2.3[138]<br>EN 14988:2017, 8.6.2.3[139] |
| **III.4.B.7 Accessibility of filling materials** | · Parts of a high chair containing filling material shall have at least one covering.[140]<br>· Opening in the covering materials or their joints that gives access to the filling material:<br>- It shall not be possible to insert the 12 mm probe by more than 6 mm.[141] | EN 14988:2017, 8.6.2.4 |
| **III.4.B.8 Protrusions** | · Each protrusion that is completely contained within the protrusion evaluation zone[142] and on a surface that is angled out from the seating area between 20° and 30° from the vertical when in one of the manufacturer's recommended use positions shall comply with either a) or b).<br>a) The protrusion shall not have an undercut[143] below its top surface.<br>b) A protrusion with an undercut below its top surface shall meet either b.1) or b.2). | ASTM F404-18, 7.16 |
| | · b.1) The top corner of a protrusion shall not protrude farther than the thickness of the ring gauge. | ASTM F404-18, 7.16, 7.16.1, and 7.16.3. |
| | · b.2) The top corner of a protrusion shall not be contactable by the protrusion accessibility gauge. | ASTM F404-18, 7.16, 7.16.2, and 7.16.3. |
| **III.4.B.9 Sharp edges and points** | · There shall be no hazardous sharp edges or points before or after the application of this standard. | 16 CFR 1500.48[144]<br>16 CFR 1500.49[145] |
| | · Seat upper front border: radius ≥ 5 mm. | Portaria 683:2012, 6.1.6.2 |
| | **There shall be no:** burrs, open-ended tubes, projections, holes, loose washers, speed fixings, nuts or crevices. | ISO 9221-1:1992, 5.2.2 |

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| PHYSICAL PARAMETER | INDITEX REQUIREMENT | REGULATION / TEST METHOD |
|---|---|---|
| **III.4.B.10 Structural integrity** | · After completing all the strength and durability tests, the requirements in III.4.A.1, III.4.B.1, III.4.B.9, III.4.B.8.shall be fulfilled and the safety and functions of the high chair shall be unimpaired.<br>· If $S_{CS}$>5mm[146]⇒Coil Spring shall be covered[147]. | GB/T_22793.2-2008, 5.6.1[148]<br>EN 14988:2017, 8.8.2 modified[149]<br>ITX-IP-02.2[150]<br>ASTM F404-18, 7.6.2[151] |
| | · The high chair shall not exhibit an instantaneous change in the height of the occupant seating surface above the floor of more than 75 mm during one cycle of the weight drop. During and after a change in the height of the seating surface, the high chair must comply with the requirements for openings as defined in III.4.B.4.<br>· If $S_{CS}$>5mm⇒Coil Spring shall be covered.<br>· There shall be no breakage of any structural component.<br>· Latching or locking devices which prevent folding of the high chair shall remain engaged.<br>· The angle of the occupant seating surface relative to the floor shall not change more than 10°.<br>· Threaded fasteners that are used for key structural elements shall not have separated by more than 1 mm.<br>· Requirements in III.4.A.1, III.4.B.1, III.4.B.9, III.4.B.8.shall be fulfilled. | EN 14988:2017, 8.8.5[152]<br>Portaria 683:2012, 6.1.14[153] |
| **III.4.B.11 Tray & Front Torso Support. Strength and stability.** | · The tray/front torso support shall not break or become detached and its function shall be unimpaired. Regarding to stability. | EN 14988:2017, 8.8.6.2[154]<br>ASTM F404-18, 7.4[155]<br>ASTM F404-18, 7.5[156]<br>ASTM F404-18, 7.6.3[157] |
| | · The high chair shall not overturn. | EN 14988:2017, 8.8.6.3[158] |
| | · Tray/front torso support drop test. Requirements of sections III.4.B.4, III.4.B.6, III.4.B.7, III.4.B.8, III.4.B.9, shall be fulfilled and its function shall be unimpaired. | EN 14988:2017, 8.8.6.4[159]<br>ASTM F404-18, 7.3[160] |
| **III.4.B.12 Retention system: Active restraint system** | · High chairs shall have an integral, permanently attached restraint system that can be adjusted to fit the range of the occupant.[161] | AS 4684—2009, 6.1 |
| | · The crotch restraint's use is mandatory when the restraint system is in use. | ASTM F404-18, 6.8.1.1 |
| | · Before shipment, the (active) restraint system should be completely attached to the high chair in the location for use in at least one of the manufacturer's recommended use position(s) and in such a manner as to not become detached through normal use. | ASTM F404-18, 6.8.6 |
| | · Straps width ≥20 mm. | Portaria 683:2012, 5.2.7.1 |
| **III.4.B.13 Restraint system anchorages** | · The restraint system anchorages shall not separate from their attachment points.[162] | ASTM F404-18, 7.8.6<br>EN 14988:2017, 8.9.1.2.2 |
| **III.4.B.14 Performance of safety restraint** | · All components of the restraint system shall show no signs of structural failure;<br>· Waist and shoulder straps and crotch restraint shall not become unfastened,<br>· Any slippage of adjustable straps shall be not more than 6 mm. | AS 4684—2009, APPENDIX B. |
| | · The restraint system and its closing means shall not break, separate, or permit removal of the CAMI test dummy[163] from the high chair.[164] | ASTM F404-18, 7.8 |

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| PHYSICAL PARAMETER | INDITEX REQUIREMENT | REGULATION / TEST METHOD |
|---|---|---|
| **III.4.B.15 Restraint system locking mechanism** | **Opening**<br>· opening strength required should be more or equal than 40 N.<br>or<br>· requires two consecutive actions, the first of which shall be maintained while the second is carried out. | Portaria 683:2012, 6.1.10.3 |
| | **Endurance**<br>· Locking fastening mechanisms shall still function properly after evaluation and the opening strength required should be more or equal than 40 N. | Portaria 683:2012, 6.1.10.4 |
| **III.4.B.16 Passive restraint system** | · In addition, If the high chair is fitted with a passive restraint system, it shall comply with the following requirements: | |
| | - The passive restraint system shall be composed for a passive crotch restraint and a horizontal element, which create openings for the child's legs. | EN 14988:2017, 8.9.1.1.3 |
| | - The leg openings on each side of the passive crotch restraint shall not allow complete passage of the wedge block. | ASTM F404-18, 7.11 |
| | - The passive crotch restraint shall not allow the leg probe to pass from one leg opening to the other. | EN 14988:2017, 8.9.1.2.5.2 |
| | **Assembly of passive crotch restraint.**<br>· Requirements of ASTM F404-18, 6.9.1.5 shall be fulfilled. | ASTM F404-18, 7.15[165] |
| **III.4.B.17 Horizontal front element** | · Products with a horizontal element in front of the child, e.g. a bar or a tray, shall have a passive crotch restraint. | EN 14988:2017, 8.9.1.2.5.2 |
| **III.4.B.18 Back rest and Reclinable back rest** | · The mechanism allowing the back rest to be adjusted shall not slip from one position to another. | EN 14988:2017, 8.9.3.2.2 |
| **III.4.B.19 Stability** | **Sideways[166]**<br>· Any leg or the high chair shall not lift from the floor. | |
| | if Cs>21000. | ASTM F404-18, 7.7.2.5 |
| | if Cs<21000. | EN 14988, 8.12.2.3 |
| | **Rearwards** | |
| | · Any leg or the high chair shall not lift from the floor. | EN 14988:2017, 8.12.2.4 |
| | · Rearward Stability Index ≥ 50. | ASTM F404-18, 7.7.2.6 |
| | **Forwards**<br>The high chair may not tilt. | |
| | · Sd≥183 mm[167] | |
| | if CF<4000. | ASTM F404-18, 7.7.2.4 |
| | if CF>4000. | EN 14988:2017, 8.12.2.5 |
| | · Sd<183 mm[168] | |
| | if CF<20653. | ASTM F404-18, 7.7.2.4 |
| | if CF>20653. | EN 14988:2017, 8.12.2.5 |
| | **Footrest and horizontal member stability** | EN 14988:2017, 8.12.2.6 |
| **III.4.B.20 Castors and wheels** | · Castors shall not be provided.[169] | ISO 9221-1:1992, 5.11 |
| **III.4.B.21 Seat cover** | · If the seat cover is removable from the frame, there must be devices for attaching it. | Portaria 683:2012, 5.2.11 |

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| PHYSICAL PARAMETER | INDITEX REQUIREMENT | REGULATION / TEST METHOD |
|---|---|---|
| **III.4.B.22 Tray Latch Release Mechanisms**[170] | · A) Tray latch release mechanisms located on the front of the tray or forward of the occupant shall comply with A.1 or A.2 or A.3.[171] | ASTM F404-18, 6.11.1-6.11.2 |
| | · A.1 Latch release surfaces on a tray latch release mechanism shall be inaccessible by the foot of the occupant as defined in Item A.1.1 or comply with Item A.1.2.<br>· A.1.1 The bottom surface of the leg/foot probe[172] assembly, shall not contact any latch release surface on the tray latch release mechanism.<br>· A.1.2 If a latch release surface is contactable by the bottom of the foot on the leg/foot probe assembly: $\alpha_{LF} \geq 30°$.[173]<br>· A.2 The direction to actuate the tray latch release mechanism must push toward the occupant.<br>· A.3 The tray latch release mechanism is a double action release mechanism. | (A.1.1) ASTM F404-18, 7.12.1<br>(A.1.2) ASTM F404-18, 7.12.2<br>(A.2) ASTM F404-18, 6.11.2.2<br>(A.3) ASTM F404-18, 6.11.2.3 |
| | · B) Tray latch release mechanisms located at the side of a tray shall comply with B.1, B.2, B.3, or B.4.<br>· B.1 For single action tray latch release mechanisms, the tray shall not become detached from the high chair in any latching position.[174]<br>· B.2 Each tray latch release mechanism shall be a double action release mechanism.[175]<br>· B.3 Two or more tray latch release mechanisms are interdependent such that the tray cannot be fully released from either side of the high chair without actuating at least two tray latch release mechanisms.[176]<br>· B.4 Tray latch release mechanism shall not be visible to the occupant and the direction of release mechanism must be no less than 85° from the direction of tray release or removal.[177] | (B1) ASTM F404-18, 7.13<br>(B2) ASTM F404-18, 6.11.3.2<br>(B3) ASTM F404-18, 6.11.3.3<br>(B4) ASTM F404-18, 6.11.3.4 |
| **III.4.B.23 Threaded Fasteners** | **Wood and Sheet Metal Screws:**<br>· Wood Screws and Sheet Metal Screws shall not be used by the manufacturer in the assembly of key structural elements of a high chair or other components that must be removed by the consumer in the disassembly of a high chair or conversion to a different use mode per the manufacturer's instructions.<br>· No high chair shall require consumer assembly of key structural elements using wood screws or sheet metal fasteners directly into wood components.<br>· Factory assembly using wood screws on key structural elements is allowed if the wood screws are a second method of attachment or the wood screws include a lock washer, glue or other means to impede loosening or detachment.<br>· Metal inserts, with external wood screw threads for screwing into a wood component and providing internal machine threads to accommodate a machine screw, that are used to secure key structural elements shall be glued or include other means to impede loosening or detaching.<br>**Metal threaded fasteners:**[178]<br>· Metal threaded fasteners secured into metal components and used to attach key structural elements shall have means[179] to impede loosening (more than 1 mm) or detachment during the evaluation required by this specification. | ASTM F404-18, 5.5 |

# III.4.C ADDITIONAL SAFETY REQUIREMENTS

## 1 What are they?

The additional safety requirements are the characteristics or safety conditions applicable to high chairs for domestic use that can not be included within any of the aforementioned categories, this means that they are not related to the dimensional or constructive properties of the product.

## 2 Which are the mandatory requirements

In order to ensure compliance with the requirements established by Inditex, the supplier must review all the parameters listed in the following table, which are applicable to specific parts or components of the high chair:

| ADDITIONAL PARAMETERS | INDITEX REQUIREMENT | REGULATION / TEST METHOD |
|---|---|---|
| **III.4.C.1 Thermal hazards**[180] | · There shall be no surface flash. | EN 71-2:2011+A1:2014, 5.5 |
| | · The flame propagation rate shall not exceed 30 mm/s. | EN 71-2:2011+A1:2014, 5.4 |
| | · Flaming or progressive smouldering of the upholstery components should not occur. | UK Furniture and Furnishings (Fire) (Safety) Regulations 1988, Statutory Instrument No. 1324 (as amended). |
| **III.4.C.2 Permanency of labels and warnings** | · Warning labels, whether paper or non-paper, shall be permanent. | ASTM F404-18, 7.9.1, 7.9.2, 7.9.3. |
| | · Warning statements applied directly onto the surface of the product[181] shall be permanent. | ASTM F404-18, 7.9.4 |
| | · Non-paper labels shall not liberate small parts. | ASTM F404-18, 7.9.5 |
| **III.4.C.3 Durability of marking** | · Labels shall show no curling, and the wording shall be easily legible according. | AS 4684:2009, 10.3 |
| **III.4.C.4 Toys** | · Permitted. | See NOTE[182] |
| **III.4.C.5 Paints and surface coatings** | · All paints and surface coatings must meet the re requirements of the section IV Chemical requirements. | IV Chemical requirements. |
| **III.4.C.6 Materials** | · All materials must meet the requirements of the section IV Chemical requirements. | IV Chemical requirements. |

# III.5 CHANGING PRODUCTS

## INTRODUCTION

### Generalities

The following requirements shall apply before and after evaluation of this standard:

- III.5.A.2, III.5.A.3, III.5.B.1, III.5.B.2 and III.5.B.8.

### General test conditions

- Before evaluation:
  - The sample shall be stored in indoor ambient conditions for at least one week immediately prior to testing.
  - The product shall be placed in a room with ambient temperature of 23 ± 5ºC for at least 1 h prior to testing. Testing shall then be conducted within this temperature range.
  - any fabrics used shall be cleaned or washed and dried twice following the manufacturer's instructions.
- No testing shall be conducted within the first 48 h of manufacturing.
- The evaluation shall be conducted on a concrete floor, which may be covered with 3 mm thick vinyl flooring cover, unless test instructs differently.
- The changing unit shall evaluated as delivered. If of knock-down type, it shall be assembled according to the instructions supplied with the unit. If the changing unit can be assembled or combined in different ways, the most onerous combinations shall be used for each test.
- All fittings shall be tightened in accordance with the manufacturer's instructions and shall not be retightened throughout the test procedure.

# III.5.A DIMENSIONAL REQUIREMENTS

## 1 What are they?

Dimension is the measure of a physical quantity[183] in a given direction and orientation. Consequently, dimensional requirements, also known as dimensions, are the characteristics or metric properties of a particular part or component of the changing product.

## 2 Which are the mandatory requirements?

In order to ensure compliance with the requirements established by Inditex, the supplier must review all the parameters listed in the following table, which are applicable to specific parts or components of the changing product:

| DIMENSIONAL PARAMETER | INDITEX REQUIREMENT | REGULATION / TEST METHOD |
|---|---|---|
| **III.5.A.1 Changing area dimensions** | · $W_1 \geq 380$mm $L_1 \geq 650$mm. | EN 12221-2:2008+A1:2013, 5.2 |
| | · $W_2 \geq 550$mm.<br>· $L_2 \geq 750$mm. | |
| **III.5.A.2 Holes, gaps and openings[184]** | · 5,33mm>h>12 mm.<br>or<br>· 5,33mm<h<12 mm⇔d<9,53 mm. | ITX-IP-01 |
| | · 25mm> Op[185]>45mm. | EN 12221-2:2008+A1:2013, 5.3.2. |
| | · 65mm>Op[186]>229mm. | EN 12221-2:2008+A1 :2013, 5.3.3.1. modified[185] |
| | · Op[187]<Torso probe[188]; unless Op >229mm[189] | ASTM F2388 – 18, 7.5 |
| | · Any shelf shall not permit the entire passage of the small head probe[190] through the exposed opening.[191] | ASTM F2388 – 18, 7.6 |
| | · Within the area 200 mm above the floor to the accessibility zone any hole, gap or opening accessible in normal use that allows the type 1 head probe[192] to pass completely through shall not be a V-shaped opening. | EN 12221-2:2008+A1:2013, 5.3.3.3 |
| **III.5.A.3 Cords, strings and other narrow fabrics** | · $L_{cs}$<220 mm. | EN 12221-2:2008+A1:2013, 5.3.4 |
| | · Loops (peripheral dimension) ≤360mm. | EN 12221-2:2008+A1:2013, 5.3.5 |
| **III.5.A.4 Moving parts** | · 5 mm >$S_{sp}$>12 mm.[193] | ITX-IP-01 |

# III.5.B PHYSICAL REQUIREMENTS

## 1 What are they?

Physical requirements, also known as construction requirements, are the characteristics, conditions and properties related to the structural design of the changing product.

## 2 Which are the mandatory requirements?

In order to ensure compliance with the requirements established by Inditex, the supplier must review all the parameters listed in the following table, which are applicable to specific parts or components of the changing product:

| PHYSICAL PARAMETER | INDITEX REQUIREMENT | REGULATION / TEST METHOD |
|---|---|---|
| **III.5.B.1 Edges and protruding parts** | · There shall be no hazardous sharp points or sharp edges as defined by 16 CFR 1500.48 and 16 CFR 1500.49.<br>· The upper edges of the barriers and the changing surface shall have a radius of not less than 2 mm. | 16 CFR 1500.48 and 16 CFR 1500.49 |
| **III.5.B.2 Small parts** | · There shall be no small parts. | 16 CFR 1501 |
| **III.5.B.3 Protective Components** | · Protective components shall not be removed. | ASTM F2388 – 18, 7.1 |
| **III.5.B.4 Stability** | · The changing unit shall not overturn and the maximum movement of any changing board flap shall be 10° from its closed position. | EN 12221-2:2008+A1:2013, 5.6 |
| **III.5.B.5 Structural integrity** | · The function of the changing unit shall be unimpaired.<br>· There shall be no breakage of the unit, nor shall it fail to conform with any other requirements in this specification.<br>· Threaded fasteners used for key structural elements shall not have separated by more than 1 mm. | EN 12221-2:2008+A1:2013, 5.7 |
| **III.5.B.6 Barriers** | · Each changing product shall include barriers as an integral part of the product.<br>· For changing products with a flat changing surface, barriers shall be provided around all sides of the changing surface.<br>· Contoured changing pads shall have barriers on the two opposing long sides.<br>· The barriers shall prevent the test cylinder from falling from the changing surface and shall not break or fail to conform with all the requirements of sections: III.5.A.2, III.5.A.4, III.5.B.1, III.5.B.2, III.5.B.3, III.5.B.11, III.5.C.1.<br>· The contoured changing pad or add-on changing unit shall not shift or slide more than 25 mm in any direction from its original position.<br>· If tabs or straps are provided to secure the contoured changing pad, the pad shall not shift or slide more than 25 mm in a direction opposite from the edge containing attachment tabs or straps. | ASTM F2388 – 18, 7.4. Modified[194] |
| **III.5.B.7 Changing board flap** | · The changing board flap shall not close and the fittings, e.g. locking mechanisms, hinges etc. shall not be damaged. | EN 12221-2:2008+A1:2013, 5.9.1[195] |
| | · Locking mechanisms, hinges etc. shall not be damaged and the changing unit shall function normally. | EN 12221-2:2008+A1 :2013, 5.9.2[196] |

*Continued on next page*

| PHYSICAL PARAMETER | INDITEX REQUIREMENT | REGULATION / TEST METHOD |
|---|---|---|
| **III.5.B.8 Locking and folding mechanisms**[197] | · If the changing table can be folded it shall not fold during the essay.<br>· Locking and folding mechanisms shall function correctly. | EN 12221-2:2008+A1:2013, 5.10 |
| | The locking mechanisms shall fulfil one of the following requirements:<br>a) require a minimum force of 50 N to release the folding mechanism before and after being tested according to EN 12221-2:2008+A1:2013, 5.10.2; or<br>b) require at least two consecutive actions to release the mechanism, the operation of the second being dependent on the first having been carried out and maintained; or<br>c) require at least two separate but simultaneous actions to release the mechanism, operating on different principles. | |
| **III.5.B.9 Child bathtub** | · No breakage or leakage shall be observed.<br>· The child bathtub and the changing unit shall remain intact and function normally. | EN 12221-2:2008+A1:2013, 5.11 |
| **III.5.B.10 Castors & wheels** | · Castors/wheels shall not be fitted except in the arrangement, either:<br>- two or more castors/wheels and at least two other support points; or<br>- four or more castors/wheels, of which at least two can be locked. | EN 12221-1:2008+A1:2013, 5.6 |
| | · The locks shall prevent the castors/wheels from rolling and they shall not unlock. | EN 12221-2:2008+A1:2013, 5.12 |
| **III.5.B.11 Threaded Fasteners** | Wood Screws Sheet Metal Screws:<br>- No changing unit shall require consumer assembly of key structural element using wood screws or sheet metal fasteners directly into wood components.<br>- Self-tapping screws shall not be used to fasten any component that is designed to be removed or loosened when dismantling the changing units for purposes of transportation or storage.<br>- Metal inserts, with external wood screw threads for screwing into a wood component and providing internal machine threads to accommodate a machine screw, that are used to secure key structural elements shall be glued or include other means to impede loosening or detaching.<br>- Metal threaded fastener, such a sheet metal screw. and machine screws, secured into metal components and used to attach key structural elements shall have lock washer, self-locking nuts. or other mean to impede loosening[198]. | ASTM F2388 – 18, 5.8<br>EN 12221-1:2008+A1:2013, 5.7 |
| **III.5.B.12 Extension elements** | · Extension elements located above the changing area shall be fitted with effective open stops. | EN 12221-1:2008+A1:2013, 5.10 |
| **III.5.B.13 Self-folding Steps** | · Self-folding steps shall be secured in their closed position by one of the following latching or locking mechanisms:<br>- The latching or locking mechanism must be a double action release system, or<br>- The latching or locking mechanism shall require a minimum force of 45 N to activate the single action release mechanism. | ASTM F2388 – 18, 7.7 |
| **III.5.B.14 Restraint system**[199] | · If a restraint system is installed on the product or available as an option, it shall meet the following:<br>- A restraint system and its closing means (for example, buckle) shall not break or separate.<br>- The anchorages shall not separate from the product.<br>- Restraints shall be capable of adjustment with a positive, self-locking mechanism that is capable, when locked, of withstanding the forces without allowing restraint movement or slippage of more than 25.4 mm. | ASTM F2388 – 18, 7.8. |

# III.5.C ADDITIONAL SAFETY REQUIREMENTS

## 1 What are they?

The additional safety requirements are the characteristics or safety conditions applicable to changing products for domestic use that can not be included within any of the aforementioned categories, this means that they are not related to the dimensional or constructive properties of the product.

## 2 Which are the mandatory requirements

In order to ensure compliance with the requirements established by Inditex, the supplier must review all the parameters listed in the following table, which are applicable to specific parts or components of the changing product:

| ADDITIONAL PARAMETER | INDITEX REQUIREMENT | REGULATION / TEST METHOD |
|---|---|---|
| **III.5.C.1 Materials** | · Wood, wood-based materials and materials of vegetable origin shall be smooth and free from splinters, from decay and insect attack.<br>· Materials shall comply with section IV. Chemical requirements for Child Care Furniture. | EN 12221-2:2008+A1:2013, 5.1 |
| **III.5.C.2 Flammability** | · The flame propagation rate of textiles, coated textile supports and plastic coverings shall not exceed 30 mm/s. | EN 71-2:1993, 5.7 |
| **III.5.C.3 Toys** | · Permitted. | See NOTE[200] |

# III.6 MATTRESSES FOR COTS AND MINICOTS

## INTRODUCTION

### Generalities

The following requirements shall be fulfilled before and after evaluation: III.6.B.5 Edges and protrusions and III.6.B.7 Deformation of the filling.

In case of flexible polyurethane foam mattresses, requirements of Portaria n.º 79, 2011 shall also be applied.

### General test conditions

- The mattress shall be tested as delivered in accordance with the manufacturer's instructions.
- All testing required by this specification shall be conducted on the same product unless otherwise specified.
- Before evaluation the mattress shall be stored in indoor ambient conditions (23 ± 5°C) for at least 24 h and evaluation shall then be conducted within this temperature range.
- All testing shall be conducted on a rigid and level surface unless the test instructions are different.

# III.6.A DIMENSIONAL REQUIREMENTS

## 1 ¿What are they?

Dimension is the measure of a physical quantity[201] in a given direction and orientation. Consequently, dimensional requirements, also known as dimensions, are the characteristics or metric properties of a particular part or component of the mattresses for cots and minicots.

## 2 ¿Which are the mandatory requirements?

In order to ensure compliance with the requirements established by Inditex, the supplier must review all the parameters listed in the following table, which are applicable to specific parts or components of the mattresses for cots and minicots:

| DIMENSIONAL PARAMETER | INDITEX REQUIREMENT | REGULATION / TEST METHOD |
|---|---|---|
| **III.6.A.1 Tolerances on nominal dimensions[202]** | · Width and length: D ± 10 mm.<br>D: nominal value. | EN 1334:1996, 6.1<br>but using the square tube specified in Subclause 5.3 of EN 16890:2017 |
| **III.6.A.2 Holes,gaps and openings[203]** | · 5,33mm>h>9,53 or<br>· 5,33mm<h<9,53 mm⇔d<9,53 mm | ASTM F2933-19, 5.5 |
| | · The 60 mm cone shall not pass throught the components of the mattress. | EN 16890:2017, 8.1.2.2 |
| **III.6.A.3 Dimensions** | **Cots option1**<br>· Mattress size: 1300mmx690mm. | ASTM F2933-19, 6.2 |
| | **Cots option 2 and Minicots**<br>· The Mattress size shall comply with section III.1.A.14.<br>**Mattress Thickness**<br>· The mattress supplied shall have a thickness that provide a minimum effective side/end height dimension specified in section III.1.A.13 and III.2.A.5. | |
| **III.6.A.4 Cords ribbons and similar** | · Shall comply with section III.1.B.18 for cots and III.2.A.16 for minicots. | |

# III.6.B PHYSICAL REQUIREMENTS

## 1 ¿What are they?

Physical requirements, also known as construction requirements, are the characteristics, conditions and properties related to the structural design of the mattresses for cots and minicots.

## 2 ¿Which are the mandatory requirements?

In order to ensure compliance with the requirements established by Inditex, the supplier must review all the parameters listed in the following table, which are applicable to specific parts or components of the mattresses for cots and minicots:

| PHYSICAL PARAMETER | INDITEX REQUIREMENT | REGULATION / TEST METHOD |
|---|---|---|
| **III.6.B.1 Labels and decals** | · Labels and decals shall be permanent and not become detached or be loosened from the product.<br>· Non-coated paper warning label shall not be applied on either side of sleeping surface. | EN 16890:2017, 8.2.1.2<br>ASTM F2933-19, 6.1 |
| **III.6.B.2 Firmness** | · The spherical load shall not be in complete contact with the inner edge of the template.[204] | EN 16890:2017, 8.2.3.2 |
| | · The feeler arm shall make no contact with the sleep surface or any covering thereof. | AS/NZS 8811.1 |
| **III.6.B.3 Small parts** | · No part that can be detached shall fit wholly within the small parts cylinder. | EN 16890:2017, 8.3.1.2 |
| **III.6.B.4 Accessibility to filling materials[205]** | **Mattress cover made of woven fabrics**<br>· Maximum slippage of thread shall be 7 mm. | EN 16890:2017, 8.3.2.3.1 |
| | **Mattress covers made of other materials**<br>· The force of rupture shall be greater than 60 N. | EN 16890:2017, 8.3.2.3.2 |
| | **Removable mattress covers**<br>The means to close/attach removable covers shall not allow a child to have access to filling materials. This requirement is met if one of the following conditions is fulfilled:<br>· a minimum force of 50 N is required to open the closing system; or<br>· two actions (e.g. push and twist) are necessary to open the closing system, the first of which shall be maintained while the second is carried out; or<br>· two independent actions are necessary to open the closing system that shall be operated simultaneously; or<br>· the use of a tool is required to open the closing system; or<br>· a non-removable inner cover is provided to avoid accessibility to the filling material. | EN 16890:2017, 8.3.2.2.3 |
| | **Strength of slide fasteners**<br>· Slide fasteners (zip), any slide fastener (zip) shall not open. | EN 16890:2017, 8.3.2.3.3 |
| | **Strength of seams**<br>· it shall not be possible to insert the front part of a 12 mm diameter probe into any opening in the seam or cover material by more than 6 mm. | EN 16890:2017, 8.3.2.3.4 |
| **III.6.B.5 Edges and protrusions** | There shall be no hazardous points or edges. | 16 CFR 1500.48<br>16 CFR 1500.49 |
| **III.6.B.6 Shrinkage** | · After cleaning/washing and drying twice in accordance with the manufacturer's instructions, the resulting shrinkage in the fabric covering materials shall not prevent removable fabrics from being refitted, and the dimensions of the mattress shall still meet the requirements of section III.6.A. | EN 16890:2017, 8.5.1 |
| **III.6.B.7 Deformation of the filling** | · The mattress shall comply with the requirements - Firmness of the mattress. of section III.6.B.2. | EN 16890:2017, 8.5.2.2 |

# III.6.C ADDITIONAL SAFETY REQUIREMENTS

## 1 What are they?

The additional safety requirements are the characteristics or safety conditions applicable to mattresses for cots and minicots for domestic use that can not be included within any of the aforementioned categories, this means that they are not related to the dimensional or constructive properties of the product.

## 2 Which are the mandatory requirements

In order to ensure compliance with the requirements established by Inditex, the supplier must review all the parameters listed in the following table, which are applicable to specific parts or components of the mattresses for cots and minicots:

| ADDITIONAL PARAMETER | INDITEX REQUIREMENT | REGULATION / TEST METHOD |
|---|---|---|
| **III.6.C.1 Materials** | · Materials shall comply with section IV Chemical requirements for Child Care Furniture. | IV Chemical requirements. |
| **III.6.C.2 Flammability** | · There shall be no surface flash, and the rate of spread of flame of textiles, coated textiles or plastic coverings shall not exceed 50 mm/s. | EN 71-2:2011+A1:2014, 5.4 |
| | · There shall be no progressive smouldering ignition or flaming ignition. | EN 597-1<br>UK Furniture and Furnishings (Fire) (Safety) Regulations 1988, Statutory Instrument No. 1324 (as amended). |
| | · Any product under this consumer safety specification shall comply with all other applicable mandatory federal statutes and regulations. | 16 CFR 1632<br>16 CFR 1633 |

# IV. CHEMICAL REQUIREMENTS

# IV.1 LIST OF ABBREVIATIONS AND ACRONYMS

| | |
|---|---|
| **BBP** | Benzyl butyl phthalate |
| **CTW** | Clear to Wear Inditex standard |
| **DBP** | Dibutyl phthalate |
| **DBT** | Dibutyltin |
| **DecaBDE** | Decabromodiphenyl ether |
| **DCM** | Dichloromethane |
| **DEHP** | Di-(2-ethyhexyl)-phthalate |
| **DEP** | Diethyl phthalate |
| **DIDP** | Diisodecyl phthalate |
| **DINP** | Diisononyl phthalate |
| **DMFu** | Dimethylfumarate |
| **DMP** | Dimethyl phthalate |
| **DNHP** | Di-n-hexyl phthalate |
| **DNOP** | Di-n-octyl phthalate |
| **DOT** | Dioctyltin |
| **GC-ECD** | Gas chromatography-electron capture detection |
| **GC-ECNI-MS** | Gas chromatography –Mass detector with chemical ionization |
| **GC-MS** | Gas chromatography–mass spectrometry |
| **HBCD** | Hexabromocyclododecane |
| **HexaBDE** | Hexabromodiphenyl ether |
| **HeptaBDE** | Heptabromodiphenyl ether |
| **HWPW-VC** | Hardwood plywood with a veneer core |
| **HWPW-CC** | Hardwood plywood with a composite core |
| **ICP-MS** | Inductively Coupled Plasma-Mass Spectrometry |
| **LC-MS** | Liquid chromatography–mass spectrometry |
| **LC-MS/MS** | Liquid chromatography -triple quadrupole mass spectrometry |
| **MCCP** | Medium-chain chlorinated paraffins |
| **MDF** | Medium-density fiberboard |
| **MDL** | Method Detection Limit |
| **ND** | Not Detected |
| **OctaBDE** | Octabromodiphenyl ether |
| **PAAs** | Primary Aromatic Amines |
| **PAHs** | Polycyclic Aromatic Hydrocarbons |
| **PB** | Particleboard |
| **PC** | Polycarbonate |
| **PCP** | Pentachlorophenol |
| **PE** | Polyethylene |
| **PentaBDE** | Pentabromodiphenyl ether |
| **ppm** | Parts per million |

| | |
|---|---|
| **PVC** | Poly vinyl chloride |
| **SCCPs** | Short-chain chlorinated paraffins |
| **TBBPA** | Tetrabromobisphenol A |
| **TCEP** | Tris(2-chloroethyl)phosphate |
| **TCPP** | Tris(2-chloro-1-methylethyl)phosphate |
| **TDCPP** | Tris(1,3-dichloro-2-propyl)phosphate |
| **TetraBDE** | Tetrabromodiphenyl ether |
| **TPEs** | Thermoplastic elastomers |
| **TVOCs** | Total Volatile Organic Compounds |
| **VOCs** | Volatile Organic Compounds |

## IV.1.A INTRODUCTION

This chapter introduces those chemical substances and parameters whose use is legally limited and which, if present in the products above certain levels, could be hazardous for human health.

The Child care furniture suppliers must provide verification that all requirements of this standard are met.

## IV.1.B TEXTILE PARTS OF THE CHILD CARE FURNITURE

This part of the standard (Chemical Requirements for Child Care Furniture) has been developed for non-textile parts (wood, plastic and metal parts, coatings, etc.) of the article. To ensure compliance with Inditex requirements, textile parts must comply with the Clear to Wear Inditex standard (CTW)[206] and with the migration requirements existing in the chapter IV.1.C.2 for the following elements: Aluminum (**Al**), Boron (**B**), Chromium-III (**Cr**(III)), Chromium-VI (**Cr**(VI)), Manganese (**Mn**), Selenium (**Se**), Strontium (**Sr**), Tin (**Sn**), Organic tin and Zinc (**Zn**).

# IV.1.C SUBSTANCES AND PARAMETERS OF LEGALLY LIMITED USE IN CHILD CARE FURNITURE MATERIALS[207]

## IV.1.C.1 HEAVY METALS

### 1 What are they?

The term heavy metal refers to naturally occurring metallic elements that have a high atomic weight, a relatively high density and are toxic at low concentrations. Their multiple industrial, domestic, agricultural, medical and technological applications have led to their wide presence in the environment.

The metals that will be considered in this section are: Lead (**Pb**), Cadmium (**Cd**), Mercury (**Hg**), Arsenic (**As**) and Antimony (**Sb**) and Chromium-VI (**Cr**(VI)).

### 2 Where can they be found?

According to this wide environmental presence and the use of some of these elements in paints and pigments, heavy metals can be present in all parts of the child care furniture.

### 3 How are they analyzed?

Total metal contents are determined following analytical procedures that include digestion of the sample with an appropriate acidic oxidant followed by detection by ICP-MS, AAS or ICP-OES.

### 4 Which are the acceptable limits?

| LIMITS FOR HEAVY METAL CONTENT | | | | |
|---|---|---|---|---|
| **HEAVY METAL** | **LIMIT (mg/kg)** | **APPLIED TO** | **ARTICLE PART** | **METHODS** |
| **Pb** | 90[208] | All Child Care Furniture of this standard. | Surface coating. | CPSC-CH-E1003-09.1 |
| | 90[209] | | Other parts. | CPSC-CH-E1002-08.3 for non metal products<br>CPSC-CH-E1001-08.3 for metal parts |
| **Cd** | 40[210] | | Plastic parts. | EN 1122: 2001 |
| | | | Non-plastic parts. | Acid digestion & ICP-MS analysis. |
| | Forbidden. | | Metallic parts. | |
| **Hg** | ND[211] | | All parts. | |
| **As** | ND[212] | | Wooden parts. | |
| | 25 | | Non-wooden parts. | |
| **Sb** | 60 | | All parts. | |
| **Cr** | ND | | Wooden parts. | |

### 5 How can they be avoided?

To meet the requirement of heavy metal content, manufacturers need to monitor thoroughly the quality of the raw materials and the manufacturing process.

## IV.1.C.2 MIGRATION OF ELEMENTS

### 1 What is it?

The presence of certain metals and metalloids in the article, and more specifically, the amount of these elements leached out from them is also an important product health parameter and should be controlled in order to ensure compliance with Inditex requirements.

The metals and metalloids that will be considered in this section are:

Aluminum (Al, CAS No. 7429-90-5); Antimony (Sb, CAS No. 7440-36-0), Arsenic (As, CAS No. 7440-38-2); Barium (Ba, CAS No. 7440-39-3); Boron (B, CAS No. 7440-42-8), Cadmium (Cd, CAS No. 7440-43-9); Chromium (Cr, CAS No. 7440-47-3); Cobalt (Co, CAS No. 7440-48-4); Copper (Cu, CAS No. 7440-50-8); Lead (Pb, CAS No. 7439-92-1); Manganese (Mn, CAS No. 7439-96-5); Mercury (Hg, CAS No. 7439-97-6); Nickel (Ni, CAS No. 7440-02-0); Selenium (Se, CAS No. 7782-49-2); Strontium (Sr, CAS No. 7440-24-6); Tin (Sn, CAS No. 7440-31-5); Organic Tin and Zinc (Zn, CAS No. 7440-66-6).

### 2 Where can it be found?

Migration of elements can be present in all parts of the child care furniture.

### 3 How is it analyzed?

Metal migrations are determined by extraction using HCl solutions in water, under specified conditions of time and temperature, followed by detection by ICP-MS, AAS or ICP-OES.

The Japanese method for the migration of heavy metals (as Lead) is performed by extraction using water under specified conditions. The level of heavy metals are determined by exposing the solution to the acidity of a sodium sulphide reagent followed by visual comparison of the sample solutions with control mixtures prepared from standard solutions containing lead. The amount of Arsenic is also determined over the water extraction solution and is indicated as the quantity of Arsenic trioxide.

### 4 Which are the acceptable limits?

| ELEMENT | | LIMITS FOR THE MIGRATION OF ELEMENTS OF CHILD CARE FURNITURE LIMITS (mg/kg)[210] | ADDITIONAL LIMITS FOR COTS AND MINICOTS | |
|---|---|---|---|---|
| | | | LIMITS (mg/kg) FOR CANADA. (COTS AND MINICOTS) | LIMITS (µg/ml) FOR JAPAN (COTS) |
| Al* | | 70000 | – | – |
| Sb | | 60[213] | 1000 | – |
| As | | 25 | 1000 | 0.1 ($As_2O_3$) |
| Ba | | 1000[214] | 1000 | – |
| B* | | 15000 | – | – |
| Cd | | 17[215] | 1000 | 0.5[216] |
| Cr | Cr (III) | 60[217] | - | - |
| | Cr (VI) | 0,053[218,219] | - | - |
| Co* | | 130 | – | – |
| Cu* | | 7700 | – | – |
| Pb | | 90[220] | – | Heavy metals: 1 (as Pb). |
| Mn* | | 15000 | – | – |

*Continued on next page*

| ELEMENT | LIMITS FOR THE MIGRATION OF ELEMENTS OF CHILD CARE FURNITURE LIMITS (mg/kg)[210] | ADDITIONAL LIMITS FOR COTS AND MINICOTS | |
|---|---|---|---|
| | | LIMITS (mg/kg) FOR CANADA. (COTS AND MINICOTS) | LIMITS (µg/ml) FOR JAPAN (COTS) |
| **Hg** | 60[221] | – | – |
| **Ni*** | 930 | – | – |
| **Se** | 460[222] | 1000 | – |
| **Sr*** | 56000 | – | – |
| **Sn*** | 180000 | – | – |
| **Organic tin*** | 12 | – | – |
| **Zn*** | 46000 | – | – |
| **Article part** | All accessible parts. | Surface coatings. | Parts made mainly of PVC and PE except coatings. |
| **Methods** | EN 71-3:2013+A2:2018 | C03 Leachable Metals Applied. Coatings 2014-02-20. | Method in Ministerial Announcement No.370 of 1959. |

*It does not apply to changing products.

## 5 How can they be avoided?

Sources that may contribute to the presence and subsequent migration of heavy metals out of the product are:

- Impurities in raw materials used in the manufacturing process.
- Coatings & additives used in the manufacturing process.

To meet the requirement of heavy metals, manufacturers need to monitor thoroughly the quality of the raw materials and the manufacturing process.

## IV.1.C.3 PLASTICIZERS

### 1 What are they?

Plasticizers are chemical substances added to polymers to increase the flexibility and durability of plastics. Phthalate esters are a family of synthetic compounds widely used as plasticizers, they are also employed as industrial solvents, additives in the textile industry and in pesticide formulations, and preservatives. The use of phthalates are legally limited in a wide range of articles.

Phosphate esters are also chemical substances employed as plasticizers, however their migration is also regulated in polymeric parts of toys.

### 2 Where can they be found?

Plasticizers can be present in some parts of the article, including:

- Flexible plastics.
- Surface coatings.
- Positional prints in textile and leather parts.

### 3 How are they analyzed?

Procedures for the analysis of phthalates consist in an initial extraction step with the appropriate organic solvent following by the determination of the plasticizers in the extract by GC/LC-MS.

### 4 Which are the acceptable limits?

<table>
<tr><th>PLASTICIZERS</th><th colspan="2">LIMIT (%)</th><th>APPLIED TO:</th><th>CHILD CARE FURNITURE PART</th><th>METHOD</th></tr>
<tr><td>Sum of phthalates: DEP (CAS No. 84-66-2),<br>- DMP (CAS No. 131-11-3),<br>- DINP (CAS No. 28553-12-0),<br>- DIDP (CAS No. 26761-40-0),<br>- DNOP (CAS No. 117-84-0).</td><td></td><td rowspan="2">Sum: 0.1</td><td rowspan="3">All Child Care Furniture of this standard.</td><td rowspan="2">Plastic parts and surface coatings of the article.</td><td rowspan="3">CPSC-CH-C1001-09.4</td></tr>
<tr><td>- DEHP (CAS No. 117-81-7),<br>- DBP (CAS No. 84-74-2),<br>- BBP (CAS No. 85-68-7).</td><td>Sum: 0.1</td></tr>
<tr><td>- DIBP (CAS No. 84-69-5).</td><td></td><td></td></tr>
<tr><td>Individually including but not limited to:<br>- DEP, DMP, DNHP (CAS No. 84-75-3), DIBP (CAS No. 84-69-5), DPENP (CAS No. 131-18-0), DHEXP (CAS No. 84-75-3) and DCHP (CAS No. 84-61-7).</td><td colspan="2">0.05 (Individually)</td><td>Accessible plastic parts and surface coatings of the article that normally can be expected, to be placed in the mouth.</td></tr>
</table>

### 5 How can they be avoided?

- By obtaining from the suppliers of chemical products and/or plastic materials the commitment and guarantee that products supplied do not contain PVC, nor phthalates or phosphates and/or that they do not transferred them to the final article, at any stage of the manufacturing process, according to the limits established above.
- By avoiding the use of adhesives containing phthalates or phosphates as plasticizers in manufacturing of the article.

## IV.1.C.4 FORMALDEHYDE EMISSION

### 1 What is it?

Formaldehyde (CAS No. 50-00-0) is a volatile chemical compound, widely used as preservative of vegetable and animal raw materials, and precursor of polymers.

### 2 Where can it be found?

- Resins used in pressed-wood products, such as particleboard, plywood, and fiberboard.
- Glues and adhesives.

### 3 How is it analyzed?

The procedure for determination of quantity of formaldehyde emitted is performed by placing the composite wood sample in an appropriate closed place, then the emitted formaldehyde is trapped by absorption over water under appropriate conditions. Finally, the determination of formaldehyde absorbed is based on the Hantzsch reaction.

### 4 Which are the acceptable limits?

| COMPOSITE WOOD MATERIAL (WOOD-BASED MATERIALS) | LIMITS | APPLIED TO: | METHOD |
|---|---|---|---|
| **Resin bonded good materials including: Laminated lumber for fixtures, Normal plywood, Fiberboards and Particle boards** | Mean: 0.3 mg/L<br>Max: 0.4 mg/L<br>(F☆☆☆☆) | Cots | JIS A-1460:2015 |
| | 0,124 mg/kg (class E1 according to EN 622-1). | Carry cots | EN 717-1 |

### 5 How can it be avoided?

The presence of formaldehyde in excess of the levels indicated above can be avoided by the following preventive measures:

- By the appropriate selection of the chemical products and wooden products before starting production.
- By obtaining from our suppliers the commitment and guarantee that the materials and chemical products used in the manufacture of the article do not contain formaldehyde according to the limits established.

## IV.1.C.5 WOOD PRESERVATIVES

### 1 What are they?

Wood preservatives are chemical compounds with biocide properties that act:

- To shield against the attack of moulds, fungus and bacteria.
- As insecticides.

### 2 Where can they be found?

Wood preservatives can be present in wood and wooden materials of the article.

### 3 How are they analyzed?

Wood preservatives are determined in acetylated extracts of the wood material by GC-ECD and/or GC-MS.

### 4 Which are the acceptable limits?

| WOOD PRESERVATIVES | LIMIT (mg/kg) | APPLIED TO: | PART | METHODS |
|---|---|---|---|---|
| **Pentachlorophenol (PCP, CAS No. 87-86-5) and its salts** | 5 | All Child Care Furniture of this standard. | Parts made of wood. | With reference to LFGB § 64 BVL B 82.02.8-2001. |
| **Copper chrome arsenate** | Banned. | Cots and minicots. | Parts made of wood. | See Note[223] |

### 5 How can they be avoided?

By obtaining from our suppliers the commitment and guarantee that the chemical products and the wooden parts supplied do not contain these substances and/or that they will not be transferred to the final article, at any stage of the manufacturing process.

### 6 Regulation on biocidal products

In addition to these prohibited biocidal substances, the biocidal products regulation mentioned in section IV.1.D.2 must be complied.

## IV.1.C.6 ASBESTOS

### 1 What are they?

Asbestos is a term used to define a group of silicate minerals that have a fibrous nature. They were widely used in the past due to its good properties, like sound absorption, average tensile strength, affordability, and resistance to fire, heat, and electricity.

Today their use is strongly regulated since their adverse health effects were proved.

### 2 Where can they be found?

All parts of the article.

### 3 How are they analyzed?

EPA 600/R-93/116. This method employs polarized light microscopy (PLM), x-ray diffraction (XRD), and analytical transmission electron microscopy (AEM) for qualitative identification of materials.

### 4 Which are the acceptable limits?

| PARAMETER | LIMIT | APPLIED TO: | ARTICLE PART | METHOD |
|---|---|---|---|---|
| **Asbestos** | Not detected. | All Child Care Furniture of this standard. | All parts of the article. | EPA 600/R-93/116. |

### 5 How can they be avoided?

By obtaining from our suppliers the commitment and guarantee that the materials used in the manufacture if the article do not contain these substances and/or that they will not be transferred to the final article, at any stage of the manufacturing process.

## IV.1.C.7 NICKEL RELEASED

### 1 What is it?

Nickel is a heavy metal that can be used as brightening agent for metallic parts and antioxidizing agent.

### 2 Where can it be found?

Nickel can be present in shiny metallic parts of the article.

### 3 How is it analyzed?

Nickel release is determined following analytical procedures that include accelerated wear and corrosion (only for coated articles and according to EN 12472), release of nickel in an artificial sweat solution and determination of the concentration of nickel by appropriate analytical method (ICP-MS or ICP-OES).

### 4 Which is the acceptable limit?

| HEAVY METAL | LIMIT (µg/cm²/week) | APPLY TO: | ARTICLE PART | METHODS |
|---|---|---|---|---|
| **Nickel released** | 0.5 | Cots | Coated metal parts. | EN 12472:2005+A1:2009 & EN 1811:2011+A1:2015 |
| | | | Non coated metal parts. | EN 1811:2011+A1:2015 |

### 5 How can it be avoided?

The presence of Nickel above the limits indicated can be avoided, among other measures, by obtaining from our suppliers the commitment and guarantee that the metal parts supplied do not contain Nickel or if contain it, the Nickel released is below the established limit.

## IV.1.C.8 $KMNO_4$ CONSUMPTION

### 1 What is it?

$KMnO_4$ (Potassium permanganate) is a chemical compound with strong oxidizing properties. Its consumption is an indicator of the amount of organic substances in the migration solution.

### 2 Where can it be found?

Potassium permanganate consumption should be analysed in polymeric parts of the article made mainly of polyvinyl chloride (PVC) or polyethylene (PE) and coatings containing PVC.

### 3 How is it analyzed?

The measurement of this parameter is carried out by adding $KMnO_4$ to the water migration solution (obtained by exposing the sample to water under described conditions) and recording the amount of KMnO4 consumed.

### 4 Which are the acceptable limits?

| PARAMETER | LIMIT (mg/ml) | APPLIED TO | ARTICLE PART | METHOD |
|---|---|---|---|---|
| **$KMnO_4$ consumption** | 50 | Cots | PVC parts and coatings containing PVC. | Specifications, Standards and Testing Methods for Foodstuffs, Implements, Containers and Packaging, Toys, Detergents 2008. JETRO, January 2009. |
| | 10 | | PE parts. | |

### 5 How can it be avoided?

The migration of organic substances out of the plastic parts of the article may be produced by the presence of non-polymerized or incompletely polymerized monomers, additives or contaminants from the manufacturing process. Manufacturers need to monitor thoroughly the quality of the raw materials and the manufacturing process.

## IV.1.C.9 EVAPORATION RESIDUE

### 1 What is it?

Evaporation residue is a parameter that measures the total amount of substances migrated out of the plastic product under specified test conditions. It is an important indication of the quality of the plastic parts.

### 2 Where can it be found?

This parameter should be analyzed in plastic parts made mainly of polyvinyl chloride (PVC) or polyethylene (PE) and in all coatings containing PVC.

### 3 How is it analyzed?

Evaporation residue is determined by exposing the sample to water under described conditions of time and temperature. After the appropriate time, water solution is separated from the sample and evaporated. Evaporation residue is gravimetrically determined.

### 4 Which are the acceptable limits?

| PARAMETER | LIMIT (mg/ml) | APPLIED TO | ARTICLE PART | METHOD |
|---|---|---|---|---|
| Evaporation residue | 50 | Cots | PVC parts and coatings containing PVC. | Specifications, Standards and Testing Methods for Foodstuffs, Implements, Containers and Packaging, Toys, Detergents 2008. JETRO, January 2009. |
| | 30 | | PE parts. | |

### 5 How can it be avoided?

To meet the requirement of evaporation residue, manufacturers need to monitor thoroughly the quality of the raw materials and the manufacturing process.

## IV.1.C.10 COLORING MATTER

### 1 What is it?

This measurement is focused on the migration of synthetic colorants out of products.

### 2 Where can it be found?

This parameter should be analyzed in all colored parts of the article.

### 3 How is it analyzed?

The qualitative procedure consists in placing a sample (colored piece) in water at 40 ºC. Then, the migration solution should be placed in a Nessler bottle under appropriate conditions and precipitation of the coloring agent should not be visible.

### 4 Which are the acceptable limits?

| PARAMETER | LIMIT | APPLIED TO: | ARTICLE PART | METHOD |
|---|---|---|---|---|
| **Coloring matter** | Not recognized.[224] | Cots | All colored parts of the cot. | Specifications, Standards and Testing Methods for Foodstuffs, Implements, Containers and Packaging, Toys, Detergents 2008. JETRO, January 2009. |

### 5 How can it be avoided?

By obtaining from the suppliers the commitment and guarantee that the parts of the article supplied do not release colorants according to the specification above mentioned. Or if colorants are released, they shall be those indicated in the foot note number [228].

# IV.1.D OTHER REGULATIONS OF MANDATORY COMPLIANCE

## IV.1.D.1 REACH

The limits established in the following regulation should be applied unless more stringent values have already been set above in this Chemical Requirements for Child Care Furniture Materials chapter.

### 1 What is it?

REACH is a European Union directive that regulates the Registry, Evaluation, Authorization and Restriction of Chemicals (Regulaion (EC) Number 1907/2006 of the European Parliament and Council and its amendments).

### 2 Is it of mandatory compliance?

REACH is a mandatory regulation for those suppliers who manufacture, distribute and/or supply to any of Inditex's brands any type of product (hereinafter, 'Product') intended to be commercialized in any European Union Member States.

The aforementioned Suppliers should properly control and manage any phase (their own and/or subcontracted) of "Product's manufacture cycle" with the aim to: (1) detect and avoid the presence of substances included in the list of "Substances of Very High Concern" (SVHC)[225] or in the "Candidate list of Substances of Very High Concern for Authorisation"[226] in amounts higher than 0.1% of the total weight of the "Products"; and (2) to justify the presence of SVHC to any external agency and/or the Inditex Sustainability Department.

If the mentioned SVHCs were to be detected in the "Product" in higher amounts than the above mentioned limit before its shipment to any EU Member States, Suppliers should immediately notify their presence in the "Product" and provide the corresponding "Corrective Action Plan" for their appropriate elimination to the to the Inditex Sustainability Department.

## IV.1.D.2 BIOCIDAL PRODUCTS REGULATION (BPR)

### 1 What is it?

The Biocidal Product Regulation (BPR), Regulation (EC) Number 528/2012 of the European parliament and Council and its amendments, concerns the placing on the market and use of biocidal products, which are used to protect humans, animals, materials or articles against harmful organisms, like pests or bacteria, by the action of the active substances contained in the biocidal product.

The BPR lays down rules for the establishment at Union level of a list of active substances,[227] which may be used in biocidal products,[228] the authorisation of biocidal products and the placing on the market of treated articles.[229]

### 2 Is it of mandatory compliance?

BPR is a mandatory regulation for those suppliers that manufacture, distribute and/or supply to any of Inditex brands any type of product (hereinafter, 'Product') intended to be commercialized in any European Union Member State.

According to the BPR, biocidal products should neither be made available on the market nor used unless authorised in accordance with this Regulation. Moreover, treated articles should not be placed on the market unless all active substances contained in the biocidal products with which they were treated or which they incorporate are approved, or be under review, in accordance with this Regulation for the relevant product-type.

Therefore, the aforementioned Suppliers should properly control and manage any phase of the 'Product's manufacture cycle' (their own and/or subcontracted) with the aim to detect if the final 'Product' is treated with or intentionally incorporates any active substance. If the 'Product' can be considered a treated article, the Suppliers must: (1) label the 'Product' in accordance to the BPR; ensure its compliance with the Regulation and (2) notify the presence of active substances in the 'Product' to the Inditex Sustainability Department.

## IV.1.D.3 CALIFORNIA PROPOSITION 65

### 1 Definition

In 1986, California voters approved an initiative to address their growing concerns about exposure to toxic chemicals. That initiative became the Safe Drinking Water and Toxic Enforcement Act of 1986, better known by its original name of Proposition 65. It requires the State to publish a list of chemicals[230] known to cause cancer or birth defects or other reproductive harm. This list, which must be updated at least once a year, has grown to include more than 800 chemicals since it was first published in 1987.

### 2 Is it of mandatory compliance?

The Proposition 65 is a mandatory labeling regulation for those suppliers who manufacture, distribute and/or supply, and sale products in the State of California.

### 3 How to meet the requirements of Proposition 65

There are no clear limits in the proposition 65 chemicals list. However, the court decisions on Proposition 65 are collected and summarized as a guideline for the suppliers to meet the requirements.[231]

## IV.1.D.4 POLYCYCLIC AROMATIC HYDROCARBONS (PAHs)

### 1 What are they?

Polycyclic aromatic hydrocarbons (PAHs) constitute a large family of organic compounds characterized by structures made of fused aromatic carbon rings.

The sources for their presence in the polymeric parts of products are:

- Contaminated softening oils in rubber and flexible (soft) plastics.
- Contaminated carbon black as a black pigment in rubber, plastics and paints.

### 2 Where can they be found?

PAHs can be present in:

- Plastics, rubber or elastomer materials.
- Varnishes, lacquers, paints or other coatings, specially in dark or black colors.

### 3 How are they analyzed?

The sample is finely cut and extracted with toluene under appropriate conditions. Then the extracts are purified, if required, and the quantification is performed by GC/MSD.

### 4 Which are the acceptable limits?

<table>
<tr><th>PAHS (CAS No.)</th><th colspan="2">INDITEX LIMITS (mg/kg)</th><th>CHILD CARE FURNITURE</th><th>METHOD</th></tr>
<tr><td>Benzo[j]fluoranthene (205-82-3)<br>Benzo[e]pyrene (192-97-2)</td><td colspan="2">0.5<br>(Individually).</td><td rowspan="3">Accessible polymeric materials and coatings.</td><td rowspan="3">AfPS GS 2014:01 PAK.</td></tr>
<tr><td>Benzo[a]anthracene (56-55-3)<br>Chrysene (218-01-9)<br>Benzo[b]fluoranthene (205-99-2)<br>Benzo[k]fluoranthene (207-08-9)<br>Benzo[a]pyrene (50-32-8)<br>Dibenz[a,h]anthracene (53-70-3)</td><td>0.5 (Individually).</td><td rowspan="2">10 for the sum of 16 PAHs.</td></tr>
<tr><td>Naphthalene (91-20-3)<br>Acenaphthylene (208-96-8)<br>Acenaphthene (83-32-9)<br>Fluorene (86-73-7)<br>Phenanthrene (85-01-8)<br>Anthracene (120-12-7)<br>Fluoranthene (206-44-0)<br>Pyrene (129-00-0)<br>Indeno[1,2,3-cd]pyrene (193-39-5)<br>Benzo[g,h,i]perylene (191-24-2)</td><td></td></tr>
</table>

### 5 How can they be avoided?

The presence of PAHs can be avoided, among other measures, by obtaining from suppliers the commitment and guarantee that the chemical products supplied do not contain PAHs and/or that they will not be transferred to the final articles, at any stage of the manufacturing process.

## IV.1.D.5 SHORT-CHAIN CHLORINATED PARAFFINS (SCCPs)

### 1 What are they?

Chlorinated paraffins are a complex group of compounds, primarily used as coolants and lubricants in metal forming and cutting. They are also used as plasticizers in paints, coatings and sealants and flame-retardants in rubber and textiles.

### 2 Where can they be found?

Short-chain chlorinated paraffins (SCCPs) can be present in polymeric materials and coatings of the article.

### 3 How are they analyzed?

The sample is finely cut and extracted with n-hexane under appropriate conditions. After SPE cleaning, an aliquot is analyzed with GC-ECNI-MS, LC-MS or LC-MS/MS.

### 4 Which are the acceptable limits?

| SUBSTANCES | LIMIT (%) | CHILD CARE FURNITURE | METHOD |
|---|---|---|---|
| **SCCPs** | ND[232] | Polymeric materials and coatings. | With reference to ISO 18219: 2015. |

### 5 How can they be avoided?

The presence of short chain chlorinated paraffins can be avoided by obtaining from our suppliers the commitment and guarantee that they do not use these substances as plasticizers and/or flame-retardant in plastic parts and coatings.

## IV.1.D.6 ORGANOTIN COMPOUNDS

### 1 What are they?

Organotin compounds are organic compounds of tin that are widely used as antifungal and antibacterial agents. They are also used as thermal stabilizers for plastics and catalysts in polymer synthesis.

### 2 Where can they be found?

Organotin compounds can be present in parts made of wood, polymeric materials and coatings of the article.

### 3 How are they analyzed?

The sample is finely cut and extracted with a methanol-ethanol mixture under appropriate conditions. Then the organotin compounds are converted to their tetraalkyl derivative by reaction with sodium tetraethylborate ($NaB(Et)_4$) and finally detected by GC-MS.

### 4 Which are the acceptable limits?

| ORGANOTIN COMPOUNDS | LIMIT (%) | CHILD CARE FURNITURE | METHOD |
|---|---|---|---|
| **Tributyltin (TBT)** | ND[233] | Wood, polymeric materials and coatings. | With reference to ISO/TS 16179:2012[234] |
| **Triphenyltin (TPT)** | 0.1 | | |
| **Dibutyltin (DBT)** | 0.1 | | |
| **Dioctyltin (DOT)** | 0.1 | | |

### 5 How can they be avoided?

By obtaining from our suppliers the commitment and guarantee that chemical products supplied do not contain organotin compounds and/or that they have not been transferred to the final article, at any stage of the manufacturing process.

## IV.1.D.7 N-NITROSAMINES

### 1 What are they?

N-nitrosamines are chemical compounds that contain in their structure a nitroso group (NO) bonded to the nitrogen atom of an amine. They can be found in elastomers (e.g. rubbers, silicones and thermoplastic elastomers (TPEs) where they can arise from precursor additives such as accelerators.

### 2 Where can they be found?

N-nitrosamines and N-nitrosatable substances can be present in accessible rubber parts/elastomers of the article (e.g. teething rail).

### 3 How are they analyzed?

Test sample is immersed in the appropriate water solution for 24 hours at a defined temperature.

- The N-nitrosamines are extracted from the aliquot with DCM and determined by GC-MS.
- The nitrosatable substances are converted into nitrosamines by acidification, extracted with DCM and determined by GC-MS.

### 4 Which are the acceptable limits?

| SUBSTANCES | LIMIT (mg/kg) | CHILD CARE FURNITURE | METHOD |
|---|---|---|---|
| **N-nitrosodimethylamine (NDMA)** | ND | Accessible rubber parts/ elastomers (e.g. Teething rail). | Method described in Directive 93/11/EEC. |

### 5 How can they be avoided?

By obtaining from our suppliers the commitment and guarantee that the child care furniture does not contain rubber parts or elastomers in accessible parts. If the child furniture contains them, by obtaining from our suppliers the commitment and guarantee that they do not contain N-nitrosamines or N-nitrosatable substances, and/or that they do not transfer them to the final article, at any stage of the manufacturing process.

## IV.1.D.8 FLAME-RETARDANTS

### 1 What are they?

Flame-retardants are chemical substances which are added to combustible materials to render them more resistant to ignition. Flame retardants of particular concern are:

- Halogenated flame-retardants.
- Organophosphorous flame-retardants.

### 2 Where can they be found?

These substances can be present in polymeric materials and coatings of the article.

### 3 How are they analyzed?

Test sample is finely cut and extracted with an organic solvent under appropriate conditions. Then, the flame retardants are determined by GC-MS or LC-MS.

### 4 Which are the acceptable limits?

| FLAME RETARDANTS | LIMIT (mg/kg) | CHILD CARE FURNITURE | METHODS |
|---|---|---|---|
| **TetraBDE (40088-47-9)<br>PentaBDE (32534-81-9)<br>HexaBDE (182677-30-1)<br>HeptaBDE (68928-80-3)<br>OctaBDE (32536-52-0)<br>DecaBDE (1163-19-5)** | ND | Polymeric materials and coatings. | Solvent extraction/GC-MS. |
| **HexaBB (36355-01-8)** | ND[235] | | |
| **HBCD (25637-99-4)** | ND[236] | | Solvent extraction, LC-MS. |
| **TBBPA (79-94-7)** | 1000 | | |
| **TCEP (115-96-8)<br>TDCPP (13674-87-8)** | ND[236] | | Solvent extraction/GC-MS. |
| **TCPP (13674-84-5)** | ND | | |

### 5 How can they be avoided?

The presence of flame-retardant compounds in excess of the levels indicated above can be avoided, among other measures, by obtaining from our suppliers the commitment and guarantee that the plastic parts and coatings supplied do not contain flame-retardants.

## IV.1.D.9 BISPHENOL A

### 1 What is it?

Bisphenol A (BPA, CAS No. 80-05-7) is an organic compound that has been used for the synthesis of polycarbonate (PC) and epoxy resin materials in industry. BPA can also be sometimes found in other types of resins, flame-retardants and polyvinyl chloride plastic.

### 2 Where can it be found?

Bisphenol A content can be present in polymeric materials and coatings of the article.

### 3 How is it analyzed?

Test sample is extracted under appropriate conditions and Bisphenol A content is determined by GC-MS.

### 4 Which is the acceptable limit?

| SUBSTANCES | LIMIT | CHILD CARE FURNITURE | METHOD |
|---|---|---|---|
| **Bisphenol A (content)** | Labelling required.[237] | Polymeric materials and coatings. | |
| | Information submission required.[236] | | |

### 5 How can they be avoided?

To prevent the presence of Bisphenol A, manufacturers need to monitor the quality of the raw materials and the manufacturing process.

# V. APPLICABLE REGULATIONS AND STANDARDS

# APPLICABLE REGULATIONS AND STANDARDS: SAFETY REQUIREMENTS

## EUROPEAN UNION

- EN 716-2:2017 Furniture - Children's cots and folding cots for domestic use. Part 2: Test Methods.
- EN 716-1+AC:2019 Furniture - Children's cots and folding cots for domestic use. Part 1: Safety Requirements.
- EN 1130:2019 Children's furniture — Cribs — Safety requirements and test methods.
- EN 71-2:2011+A1:2014 Safety of toys. Flammability.
- EN 16890:2017 Children's furniture - Mattresses for cots and cribs - Safety requirements and test methods.
- EN 14988:2017 Children's high chairs - Requirements and test methods.
- EN 1466:2014 Carrycots and stands. Safety requirements.
- EN 12221-1:2008+A1:2013 Child use and care articles - Changing units for domestic use. Safety requirements.
- EN 12221-2:2008+A1:2013 Child use and care articles - Changing units for domestic use Part 1: Safety requirements Part 2: Test methods.
- The Furniture and Furnishings (Fire) (Safety) Regulations 1988 No.1324 and amendments.

## UNITED STATES OF AMERICA (USA)

- Consumer Product Safety Improvement Act (CPSIA) Section 104 of 2008.
- Consumer Product Safety Act (CPSA).
- 16 CFR 1219 (Safety Standard for Full-Size Baby Cribs).
- 16 CFR 1220 (Safety Standard for Non-Full-Size Baby Cribs).
- ASTM F1169-19 Standard Consumer Safety Specification for Full-Size Baby Cribs.
- ASTM F406-19 Standard Consumer Safety Specification for Non-Full-Size Baby Cribs/Play Yards.
- ASTM F2933-19 Standard Consumer Safety Specification for Crib Mattresses.
- ASTM F2194-16$^{e1}$ Standard Consumer Safety Specification for bassinets and cradles.
- 16 CFR 1303 Ban of lead containing paint and certain consumer products bearing lead- containing paint.
- 16 CFR 1632 Standard for the flammability of mattresses and mattress pad.
- 16 CFR 1633 Standard for the flammability (open flame) of mattress sets.
- ASTM F404-18 Standard Consumer Safety Specification for High Chairs.
- ASTM F2388-18 Standard Consumer Safety Specification for Baby Changing Products for Domestic Use.

## CANADA

- Canada Consumer Product Safety Act (CCPSA) (S.C. 2010c.21).
- Industry Guide for the Classification of Cribs, Cradles, Bassinets and Related Products (Health Canada, 2014).
- SOR 2016-152 Cribs, Cradles and Bassinets Regulations.

## BRAZIL

- Portaria do Inmetro nº 53/2016, Anexo I: Regulamento Técnico Da Qualidade Para Berços Infantis.
- ABNT NBR 15860-1: 2016 Furniture – Domestic type children's cots and folding cots Part 1: Safety Requirements.
- ABNT NBR 15860-2: 2016 Furniture – Domestic type children's cots and folding cots Part 2: Test Methods.
- ABNT NBR 15413-1:2013 Colchão de molas e bases - Parte 1: Requisitos e métodos de ensaio.
- ABNT NBR 15413-2:2011 Colchão de molas e bases - Parte 2: Revestimento.
- ABNT NBR 13579-1:2011 Colchão e colchonete de espuma flexível de poliuretano e bases - Parte 1: Requisitos e métodos de ensaio (Mattresses And Thinner Mattresses Fully Made Of Flexible Polyurethane Foam And Bases - Part 1: Requirements And Test Methods).
- ABNT NBR 13579-2:2011 Colchão e colchonete de espuma flexível de poliuretano e bases - Parte 2: Revestimento.
- ABNT NBR NM 300-1 Segurança de brinquedos - Parte 1: Propriedades gerais, mecânicas e físicas.
- ABNT NBR 16067-1:2012 Móveis – Berços, berços de balanço ou pendular de até 900 mm para uso doméstico - Parte 2: Requisitos de segurança.
- ABNT NBR 16067-2:2012 Móveis – Berços, berços de balanço ou pendular de até 900 mm para uso doméstico - Parte 2: Métodos de ensaio.
- ABNT NBR 15991-1:2011 Children´s high chairs. Part 1: Safety requirements.
- ABNT NBR 15991-2:2011 Children´s high chairs. Part 2: Test methods.

## CHINA

- QB 2453.1-1999 Children's Cots and Folding Cots for Domestic Use – Part 1: Safety Requirements.
- QB/T 2453.2:1999 Children's Cots and Folding Cots for Domestic Use. Part 2: Test Methods.
- GB 30004:2013 Safety requirements of cradle.
- GB 18584 Indoor decorating and refurbishing materials--Limit of harmful substances of wood-based furniture.
- GB 6675.1 Toy safety part1-Basic Code.
- GB 6675.2 Toy safety part2-Mechanical and physical properties.
- GB 6675.3 Toy safety part3-Flammability.
- GB 6675.4 Toy safety part 4-Migration or certain elements.
- GB 22793.1-2008 Furniture. Children´s high chair. Part 1: Safety requirements. GB 22793.2-2008. Furniture. Children´s high chair. Part 2: Test methods.

## HONG-KONG

- Chapter 424, Toys and Children's Products Safety Ordinance.
- Toys and Children's Products Safety Ordinance T-2 Cap. 424.
- Toys and Children's Products Safety Ordinance (Amendment of Schedules 1 and 2) Notice 2017. L.N. 102 of 2017.

## JAPAN

- Consumer Product Safety Act (Consumer Safety Law) [Act Nº31 of June 6, 1973 as last amended by Act Nº 105 of August 30, 2011].
- PSC Standard for Cots (Outline of the Consumer Products Safety Act - Part 3).
- Japanese Standard JIS S 1103:2014 Wooden baby cots.

## SOUTH KOREA

- Children's Product Safety Special Act [Trial 06/04/2015] Law No. 12 733, 03.06.2014 (Korean Agency for Technology and Standards - KATS), 043-870-5453.
- Quality Management and Safety Control of Industrial Products Act, March 2007.
- Self-Regulatory Safety Confirmation Standard - Annex 14 - Part 4 - Children`s Cots.
- KS G 7175-1:2014 Children's Cots and Folding Cots for Domestic Use. Part 1: Safety Requirements.
- KS G 7175-2:2014 Children's Cots and Folding Cots for Domestic Use. Part 2: Test Methods.
- Special Act on Children´s Product Safety. Annex 8: High Chairs.

## TAIWAN

- CNS 11676-2006 Children's cots and folding cots for domestic use.
- CNS 12990-2017 Cradles.
- CNS 4797 Safety toys.
- CNS 15017 Children' high chair.

## AUSTRALIA & NEW ZEALAND

- Fair Trading Act 1986 (Household cots // NZS).
- AS/NZS 2172: 2013 Cots for Household use. Safety requirements.
- AS/NZS 8811.1:2013 Methods of testing infant products Method 1: Sleep surfaces – Test for firmness.
- AS/NZS 8811.1:2013 Methods of testing infant products Method 1: Sleep surfaces – Test for firmness.

## INTERNATIONAL ISO STANDARDS

- ISO 9221-1:1992 Furniture. Children´s high chair. Part 1: Safety requirements.
- ISO 9221-2:1992 Children´s high chair. Part 2: Test methods.
- ISO 9221-1:2015 Furniture. Children´s high chair. Part 1: Safety requirements.
- ISO 9221-2:2015 Children´s high chair. Part 2: Test methods.

# APPLICABLE REGULATIONS AND STANDARDS: CHEMICAL REQUIREMENTS

## INTERNATIONAL ISO STANDARDS

- ISO 8124-3:2010/ Amd 2:2018 Safety of toys-Part 3: Migration of certain elements.
- ISO 7175:2019 Children's cots and folding cots for domestic use.

## EUROPEAN UNION

- Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) and its amendments.
- Regulation (EC) No 850/2004 of the European Parliament and of the Council of 29 April 2004 on Persistent Organic Pollutants and its amendments.
- Directive 2009/48/EC of the European Parliament and of the Council of 18 June 2009 on the safety of toys.
- EN 71-3:2019 Safety of toys - Part 3: Migration of certain elements.
- EN 71-9:2005+A1: 2007 Safety of toys- Part 9: Organic chemical compounds requirements.
- EN 71-10:2005 Safety of toys: organic chemical compounds: sample preparation and extraction.
- EN 71-11:2005 Safety of toys: organic chemical compounds: test methods.
- Regulation (EU) No 528/2012 of the European Parliament and of the Council of 22 May 2012 concerning the making available on the market and use of biocidal products.

## AUSTRIA

- BGBl. II No. 477/2003 and its amendments, Regulation of the Minister of Agriculture, Forestry, Environment and Water Management on further prohibitions and restrictions of certain hazardous substances, preparations and finished goods (Chemicals Prohibition Ordinance 2003 - Chem-VerbotsV 2003).
- BGBl. No. 194/1990 and its amendments, Regulation of the Federal Minister for Environment, Youth and Family of 12 February 1990 on restrictions on the Inverkehrsetzens and on the identification containing formaldehyde substances, preparations and finished goods (Formaldehyde Regulation).

## DENMARK

- Regulation No. 858/2009, Statutory Order on the prohibition of the importation, sale and manufacture of products containing cadmium.
- Regulation No. 856/2009, Statutory Order on Prohibition of the Importation and Sale of Products Containing Lead.
- Regulation No. 855/2009, Statutory Order on the Ban on Phthalates in Toys and Childcare Articles.
- Regulation No. 854/2009, Statutory Order on the Prohibition of the Importation, Sale and Use of Products Containing Pentachlorophenol.

## GERMANY

- Ordinance on bans and restrictive measures for the marketing of hazardous substances, preparations and products according to the Chemicals Act. (Chemicals Prohibition Ordinance-ChemVerbotsV) enacted in 1993 and its amendments.
- Consumer Goods Ordinance (BedGgstV) enacted in 1997 and its amendments.

## NORWAY

- FOR-2018-07-09-1168 Regulations on the restriction of use of hazardous chemicals and other products (Product Regulations).

## SWEDEN

- SFS 2018:55 The Chemical Products (Handling, Import and Export Prohibitions).

## SWITZERLAND

- SR 814.81 Ordinance on the Reduction of Risks relating to the Use of Certain Particularly Dangerous Substances, Preparations and Articles (Chemical Risk Reduction Ordinance, ORRChem) of 18 May 2005 and its amendments.
- SR 817.023.41 Ordinance on articles for the mucosa, skin and hair contact, as well as candles, matches, lighters and joke articles (Ordinance on articles for human contact) of 23 November 2005 and its amendments.

## UNITED STATES OF AMERICA (USA)

### Federal regulations

- 16 CFR Part 1303 Ban of lead-containing paint and certain consumer products bearing lead-containing paint.
- Public Law No. 110–314, 122 Stat. 3016, Consumer Product Safety Improvement Act of 2008 (CPSIA) and its amendments. Section 101, Children's products containing lead, lead paint rule; and Section 108, Prohibition on sale of certain products containing specified phthalates.
- Public Law No. 112-28, Section 5: application of phthalates limit. Consumer Product Safety Improvement Act of 2008 (CPSIA).
- 16 CFR Part 1307 Prohibition of Children's Toys and Child Care Furniture Containing Specified Phthalates.

### State regulations

#### California

- Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65) and court decisions that develop it.
- Health and Safety Code, Division 104, Part 3, Chapter 11, Phthalates in Products for Young Children (108935-108939) (108920-108923).

### Hawaii

- Title 19, Section 332D, Polybrominated Diphenyl Ethers enacted in 2017.

### District Columbia

- Code of the District Columbia. Title 8, Chapter 1. Environmental Controls. Subchapter IV-A. § 8–108.02. Prohibitions on polybrominated diphenyl ethers.

### Illinois

- 410 ICLS 45 Lead Poisoning Prevention Act, enacted in 2006 and its amendments.
- 410 ILCS 48 Brominated Fire Retardant Prevention Act, enacted in 2005.

### Maine

- 38 M.R.S.A. § 1609 Restrictions on sale and distribution of Brominated Flame Retardants enacted in 2007.
- 06-096 CMR Chapter 882 Regulation of Chemical Use in Children's Products.

### Maryland

- Md. Environment Code Ann. §6-1201-1205, Brominated Flame Retardants, enacted in 2005.
- 24–306, Child Care Products Containing Flame-Retardant Chemicals, enacted in 2013 and its amendments.

### Minnesot

- 325F.071 Flame-Retardant Chemicals; Prohibition, enacted in 2015.
- 325E.386 Products containing certain polybrominated diphenyl ethers banned; exemptions, enacted in 2007.

### New York

- N.Y. Envtl. Conserv. Law §§ 37-0701 – 37-0709 and 71-3703; Tris-Free Children and Babies Act. enacted in 2011 and its amendments.
- N.Y. Envtl. Conserv. Law § 37-0111 Prohibition against brominated flame retardants.

## New York counties

### County of Albany

- Local Law No. 1-2017, The Toxic Free Toys Act.

### County of Suffolk

- Local law nº 26 of 2017 amending "the toxic free toys act".

### Oregon

- Chapter 453. 085.Prohibited acts.

### Rhode Island

- 23-13.4 Hazardous Chemicals-Contamination of Breast Milk and Environment, enacted in 2006.

### Vermont

- 18 V.S.A. § 1511 Phthalates enacted in 2008.
- Title 9, Chapter 80, Articles 2971-2980, Flame Retardants, enacted in 2009.

### Washington

- 70.240 RCW Children's Safe Products enacted in 2008 and its amendments.
- 70.76 RCW Polybrominated diphenyl ethers-Flame Retardants.

### District Columbia

- Code of the District Columbia, Title 8, Chapter 1. Environmental Controls. Subchapter IV-A. § 8–108.02. Prohibitions on polybrominated diphenyl ethers.

### Wisconsin

- 299.49, Products Containing Mercury enacted in 2009.

## CANADA

- SOR 2010-273 Consumer Products Containing Lead (Contact with Mouth) Regulations.
- SOR 2005-109 Surface Coating Materials Regulations.
- SOR 2016-193 Phthalates Regulations.
- SOR 2012-285 Prohibition of Certain Toxic Substances Regulations and its amendments.
- S.C. 1999, c. 33 Canadian Environmental Protection Act.

## BRAZIL

- Portaria do Inmetro No. 53/2016, Anexo I: Regulamento Técnico Da Qualidade Para Berços Infantis.
- ABNT NBR NM 300-1:2004 Corrected version:2011, Safety of toys Part 1: Safety aspects related to mechanical and physical properties.
- ABNT NBR NM 300-3:2004 Corrected version:2011. Safety of toys, Part 3: Migration of certain elements.
- Portaria No. 369/2007.

- ABNT NBR 15991-1:2011 Children ´s high chairs. Part 1: Safety requirements.
- ABNT NBR 15991-2:2011 Children ´s high chairs. Part 2: Test methods.

### CHINA

- GB 18584:2001 Indoor decorating and refurbishing materials-Limit of harmful substances of wood based furniture.

### HONG-KONG

- Chapter 424, Toys and Children's Products Safety Ordinance.

### JAPAN

- Specifications and Standards for Foods, Food Additives, Part IV Toys under Japan Ministry of Health and Welfare Notice No. 370, No. 153 and Notice No. 336.

### SOUTH KOREA

- Children´s Product Safety Special Law, enacted in 2014 and its standards:
  - Safety Check for Safety Standards for Children´s Products (Notice Nº 2015-108). Annex 14-Children`s Cots, enacted in 2015.
  - Supplier´s Standards of Compliance Verification for Safety in Children´s Products (Notice Nº 2015-109). Annex 14- Furniture for Children, enacted in 2015.

### TAIWAN

- CNS 4797-2: 2004 Toy Safety Standards. Migration of certain elements.
- CNS 15503 Z7312 General Requirements for Safety of Children´s Products.

### AUSTRALIA / NEW ZEALAND

- AS/NZS ISO 8124.3:2012 Amdt 1:2016, Safety of toys. Migration of certain elements.
- F2011L00192. Competition and Consumer Act 2010 - Consumer Protection Notice No. 11 of 2011 - Permanent ban on children's products containing more than 1% of DEHP.
- AS 1789 Electroplated zinc (electrogalvanized) coatings on ferrous articles (batch process).
- AS 1956 Anodic oxidation coating on aluminium for decorative and automotive applications.
- AS 4684-2009 High chairs—Safety requirements.
- AS 1192 Electroplated Coating-Nickel and chromium.
- NZS 5820 Specification for the safety of toys.

# VI. ANNEXES

# ANNEX I. GLOSSARY

## GLOSSARY OF TERMS: TECHNICAL VOCABULARY

**Access:** opening created by operating a part or parts of the cot/minicot/carrycot, usually the locking mechanisms of the movable sides or ends of the cot/minicot, so that it can be reached without difficulty the interior of the cot/minicot/carrycot, thus obtaining an easy access to the occupant.

**Access side:** means a side of a cot/minicot/carrycot the bottom part of which is stationary and the top part of which has one or more adjustment positions.

**Accessory:** accessory means a product, including a change table accessory and a sleep accessory, that is designed or advertised to be used with a cot/minicot/carrycot and that has the following characteristics:

- it is designed to support the weight of a child;
- it can be placed on or fixed to the minicot/rocking minicot, and
- its primary function is:
  - in the case of a change table accessory, to allow the changing of a child's diaper or the dressing of a child,
  - in the case of a sleep accessory that has sides to confine the child, to provide sleeping accommodation for a child, and
  - in any other case, to provide a play area for a child or an area to enable caregiver-child interaction.

**Adjustment position:** means a position in which the movable part of an access side latches or locks and from which it cannot be moved without being unlatched or unlocked.

**Adjustment position of a movable side:** position of a movable side in which it remains secured or locked, not being able to move from that position until the locking system or locking device is activated to release it. The most common adjustment positions are the 'open' and 'closed' positions, which correspond to the side of the product in its lowest and highest setting position respectively.

**Adjustment position of the base:** position of a product base in which it remains secured or locked, not being able to move from that position until the locking mechanism is activated to release it. The most common adjustment positions are the 'lowest' and 'highest' positions.

**Barrier:** any component of the changing product intended to prevent a child from rolling or falling off the changing surface.

**Changing board flap:** changing surface that is raised to provide access to another function, e.g. a bathtub. See Figure 50.

**Cover (Structural):** structural cover means a key structural component of a minicot/carrycot, that has the following characteristics:

- it is made of a textile or other pliable material;
- it attaches to the frame of the product with a zipper, snaps, buttons or other similar fasteners;
- it completely or partially defines the occupant retention area; and
- it is removable.

**Crotch restraint:** device passing between the legs of the child and preventing the child from slipping forwards out of the high chair. Types:

– Active: This crotch restraint requires that the carer performs an action to ensure that the child is secured in the restraint system. (e.g. click buckles).

– Passive: It is a component that separates the openings for the legs of the occupant into two separate bounded openings and requires no action on the part of the caregiver to use except to position one leg into each opening created by the component. It might be made of flexible material, such as fabric or webbing.

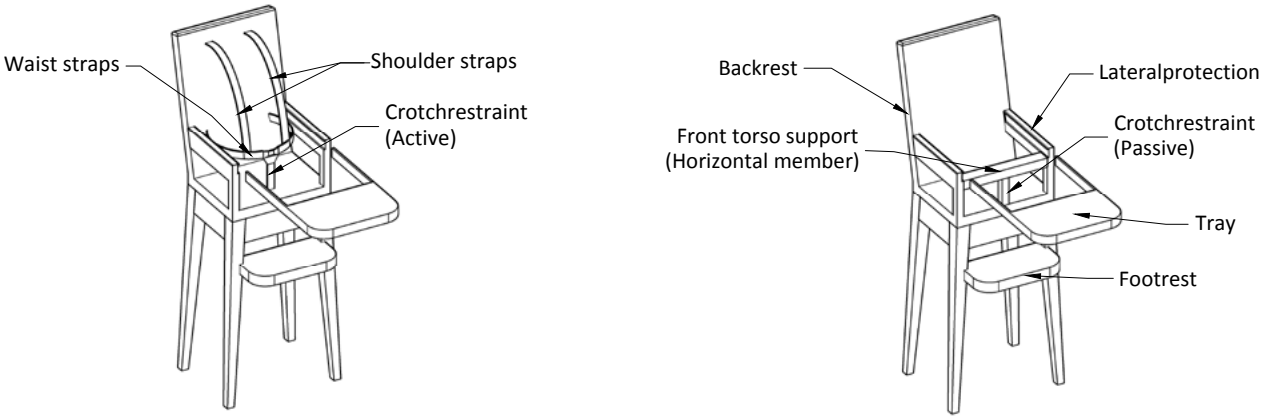
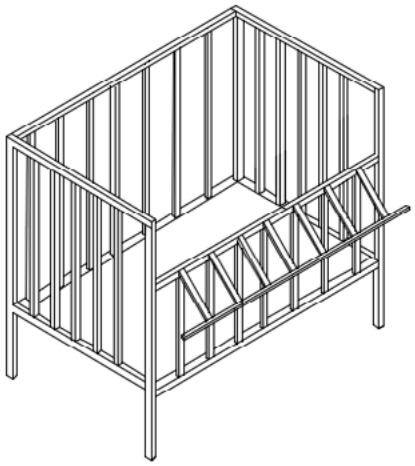



***Figure 11**. Active and passive crotch restraint.*

**Double action release mechanism:** mechanism requiring either two consecutive actions, the first of which must be maintained while the second is carried out or two separate and independent single action locking mechanisms that must be activated simultaneously to fully release.

**Drop-gate side:** side of a product in which the lower part of the side is stationary or fixed, and above this, is located a foldable portion that is intended to pivot with respect to the frame by means of using hinges or similar mechanisms.



**Extension element:** component that can be pulled out and pushed in. (Baskets, drawers and alike).

**False latch/lock visual indicator:** a warning system using contrasting colors, lights, or other similar means designed to visually alert caregivers when a removable product bed is not properly locked onto its base/stand.

**Folden mattress basema:** Mattress base specifically seigned to be folded for ease of storage, when not in use.

**Foothold / toehold:** a foothold is any element or component on which the child can stand, such as ledges, reliefs, protrusions, bars, etc. As footholds could be considered the following:

· The upper surface of the cot base and the top surface of the mattress base are the main footholds located inside the cot.

- Any surface greater than 5 mm deep and 15 mm wide inclined at less than 75 degrees to the horizontal should be regarded as a foothold.
- Ledges on the inside of the cot that protrude more than 5 mm from the vertical plane.
- Reliefs in the internal surface of the cot deeper than 5 mm.
- If ledges and reliefs are combined, the total depth shall not exceed 5 mm.
- Any bar, protrusion, rail, tube, edge, etc., if it has a depth of 10 mm or more.
- The upper surface of the sides and ends of the cot shall not be considered a foothold.

**Front torso support (Horizontal member):** a barrier extending horizontally across the seat of the high chair that is the primary support intended to restrict forward movement of the occupant´s torso when the tray is removed and creates a completely or partially bounded opening in front of the occupant. See Figure 6.

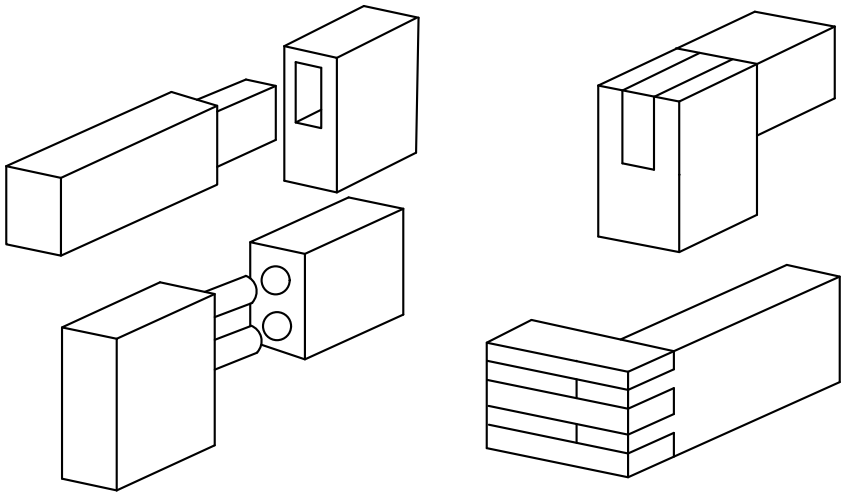
**High chair conversion kit:** an accessory or component sold by the manufacturer of a product or high chair and used to convert or modify a product so that it can be used as a high chair.

**Integral harness:** Assembly intended to retain the child in the high chair comprising either a crotch restraint, waist strap and shoulder straps or comprising straps that pass over the child´s shoulders and between the child´s legs. See Figure 43.

**Irregularly shaped article:** cot/minicot are usually designed and manufactured with rectangular shape. Any cot/minicot with a different shape will be considered an irregularly shaped cot (e.g. oval, hexagonal, circular cots, etc.).

**Junction line:** intersection of the seat and the back rest. See Figure 41.

**Lateral joints and transverse joints (finger-joints):** means of joining pieces of lumber end-to-end.



**Mattress base/support:** mattress support includes, in case of a cot/minicot/carrycot that is designed to be used without a mattress, the surface that supports the weight of the child. Cot base and mattress combined in one component.

**Mattress topper:** Upholstery product that comprises a cover filling(s) designed to be used on top of a mattress.

**Maximum deflection angle:** the maximum rock/ swing angle measurement allowed by the product design in the manufacturer's recommended use position in the manner normally associated with rocking/swinging as intended by the manufacturer.

**Mesh (metallic):** links of iron or other metal linked together forming a network structure. This type of mesh is commonly used for the construction of the cot base.

**Movable side:** side of an article that has one or more adjustment positions. Its main function is to provide easy access to the occupant. The most common movable sides are sliding sides and drop-gate sides, but there may be more configurations (foldable sides, rotating sides, etc.).

**Protected volume (Accessibility zone):**

- **for cots (Accessible area / accessible parts):**

  – When a child's hand can not reach through sides or ends, accessible parts are the inside of the cot and the exterior of the cot within a distance of 300 mm measured in any direction.

  – When a child's hand can reach through sides or ends, accessible parts are the whole cot except the underside of the cot base.

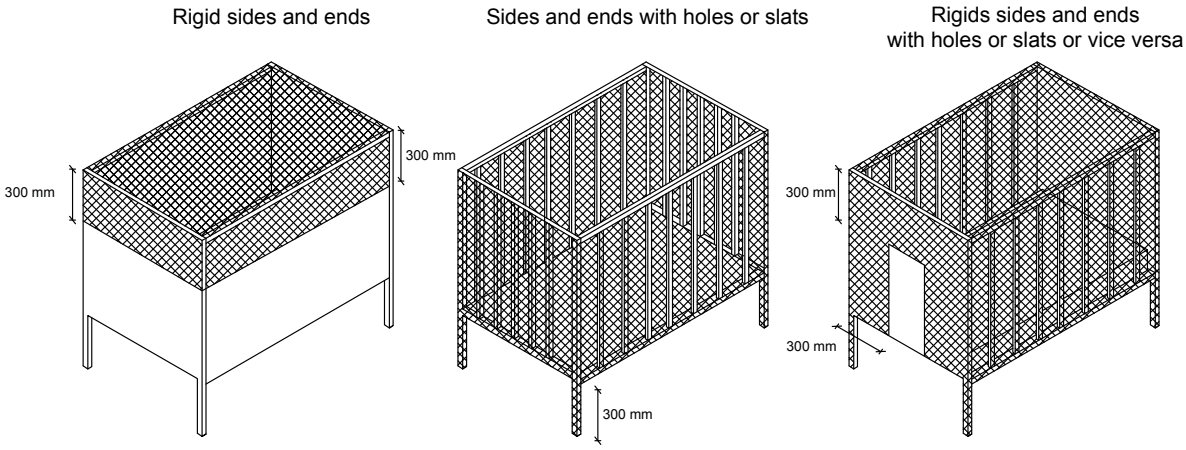



*Figure 12. Representation of the accesible area or accesible parts of the cot.*

- **for minicots:** when the minicot is assembled according to the manufacturer´s instructions the protected volume is defined as follows:

  – when a child's hand can neither reach through sides nor ends, the protected volume includes the inside and the exterior of the minicot 50 mm measured in any direction from the upper part of the rim.

  – When a child´s hand can reach through sides or ends, the protected volume includes the whole minicot (except for the underside of the minicot base) and the exterior zone of the minicot within a radius of 380mm above the base minicot and a radius of 150 below the horizontal plane of the base. See Figure 13.

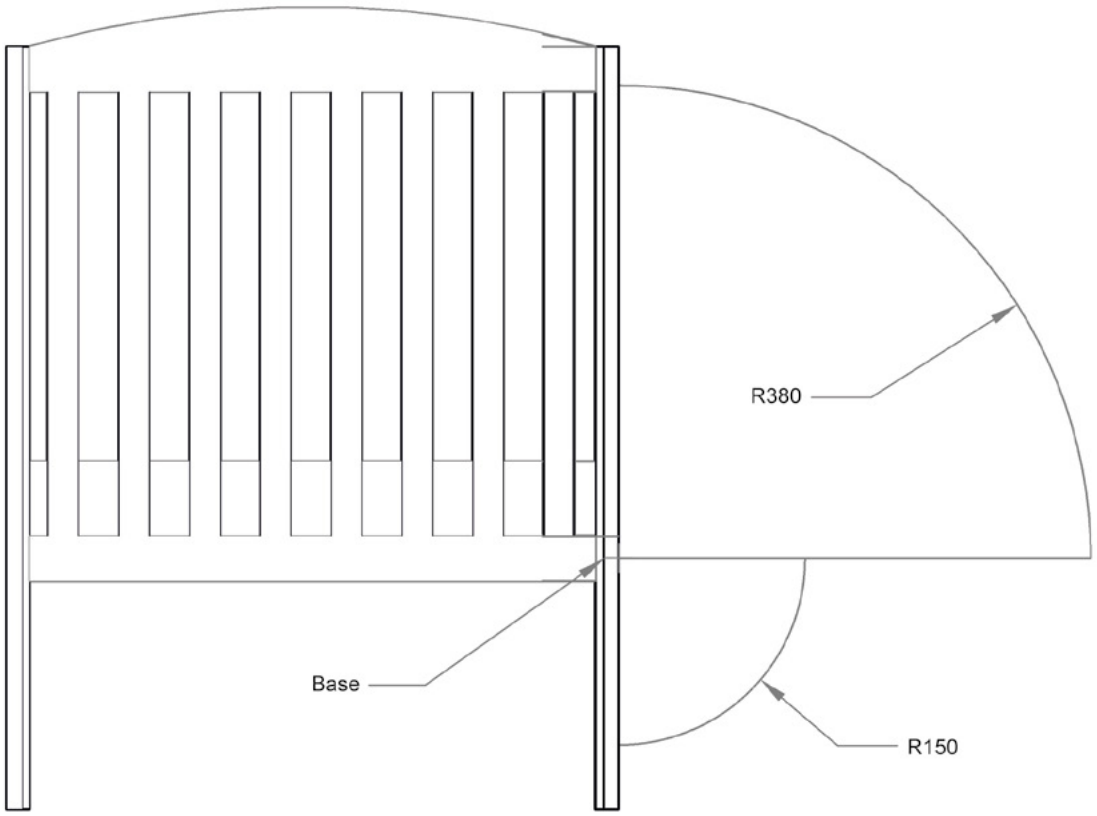



*Figure 13. Protected volume outside of the minicot when the child can reach through sides or ends.*

- **for carrycots:** volume accessible by the child (occupant) when lying in the carry cot where specific safety requirements are necessary. The protected volume is determined by:

  – the inner upper surface that supports the child, and

  – the inner surface of the sides and ends of the carry cots.

- **for changing products:** the protected volume is the space around the changing area within the child's reach. The volume contained within 550 mm above the changing area and within 200 mm around the changing area measured horizontally from the inside of the area. See Figure 14.

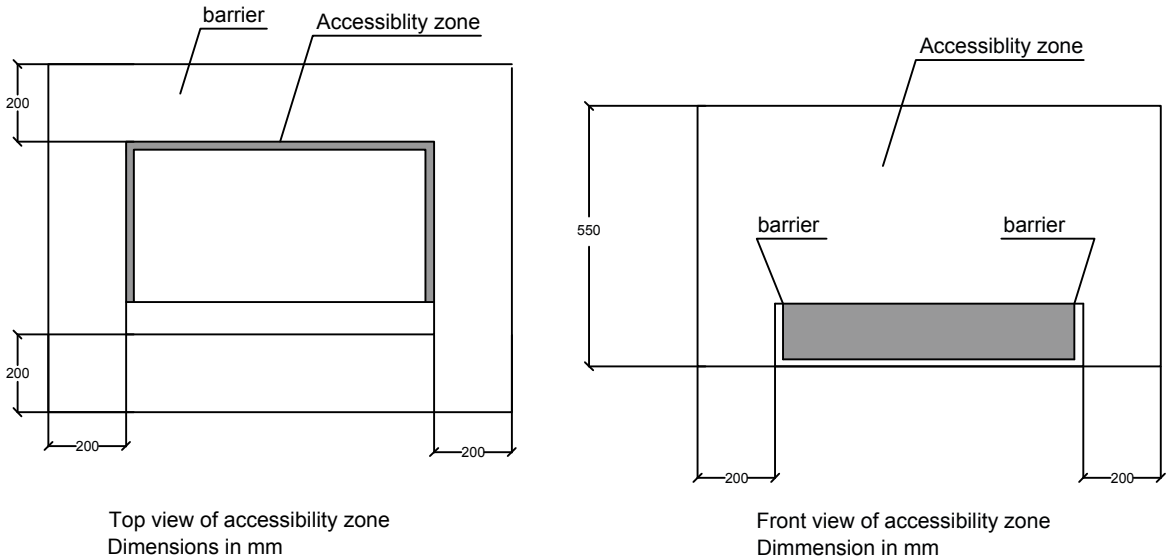



*Figure 14. Top and front view of accessibility zone of the changing product.*

**Protective component:** any component used for protection from sharp edges, points, or entrapment of fingers or toes. (Examples of protective components include caps, sleeves, and plugs).

**Protrusion:** a rigid projection that is elevated above the immediately adjacent surface, which the clothing of the occupant of the cot could become entangled or hooked up, and thus could cause injury to the occupant. (Snag points are protunding parts).

**Protrusion evaluation zone:** areas on the exterior planes of the high chair base at the rear corners which are within 51 mm. from the corners formed by the intersection of the rear and sides planes of the base and are located between 305 mm and 432 mm. above the floor. See Figure 15 and Figure 43.

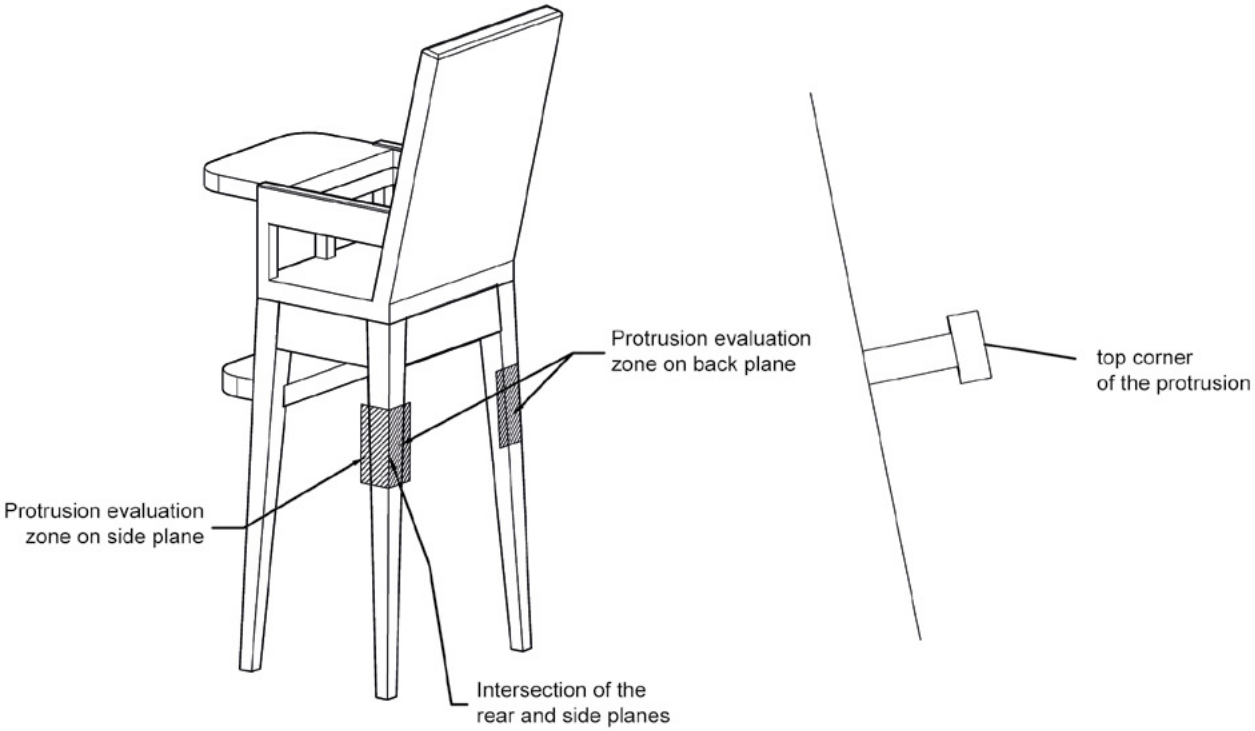



***Figure 15**. Protrusion evaluation zone and protrusion example.*

**Removable carrycot bed:** carrycot bed that is designed to separate from the base/stand without the use of tools.

**Removable components:** parts or components that the child can grasp (grip) between its thumb and forefinger or between its teeth.

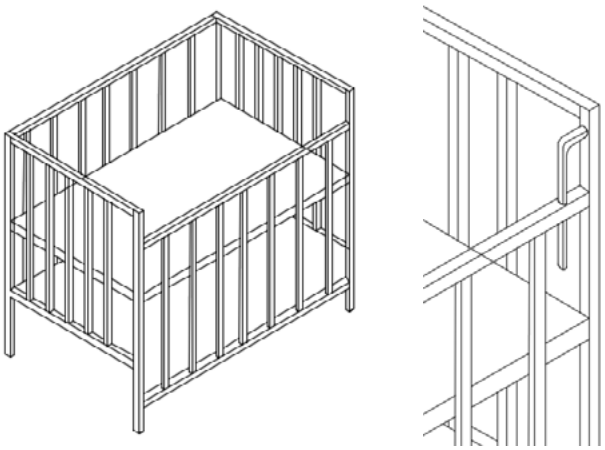
**Rest angle:** the resulting angle measurement of the minicot sleeping surface after the maximum deflection angle is applied and released and the product has come to a complete rest.

**Restraint system:**

- **active:** system where the carer performs an action to ensure that the child is secured in the restraint system.
- **passive:** system where the carer does not perform an action to ensure that the child is secured in the restraint system.

**Shear and squeeze point:** gaps which can cause harm to parts of the body and which occur when two parts close together or open during relative movements.

**Sliding side:** side of an article in which, all or part of it, can slide up and down in order to close off or provide easy access. The most usual configuration of this type of sides consists of using a guide rod to allow free movement of the side from top to bottom and vice versa.



**Stationary side:** side or end panel of a cot/minicot that is not intended to slide, fold or move with respect to the frame when the product is in the manufacturer's recommended use position. It is not allowed the movement of the side or end panel of the cot in any direction or orientation.

**Tether:** a means of attaching a component using flexible plastic, webbing, or cord.

**Ticking:** outermost layer of fabric or related material that encloses the core and upholstery materials of a mattress. A mattress ticking may consist of several layers of fabric or related materials quilted together.

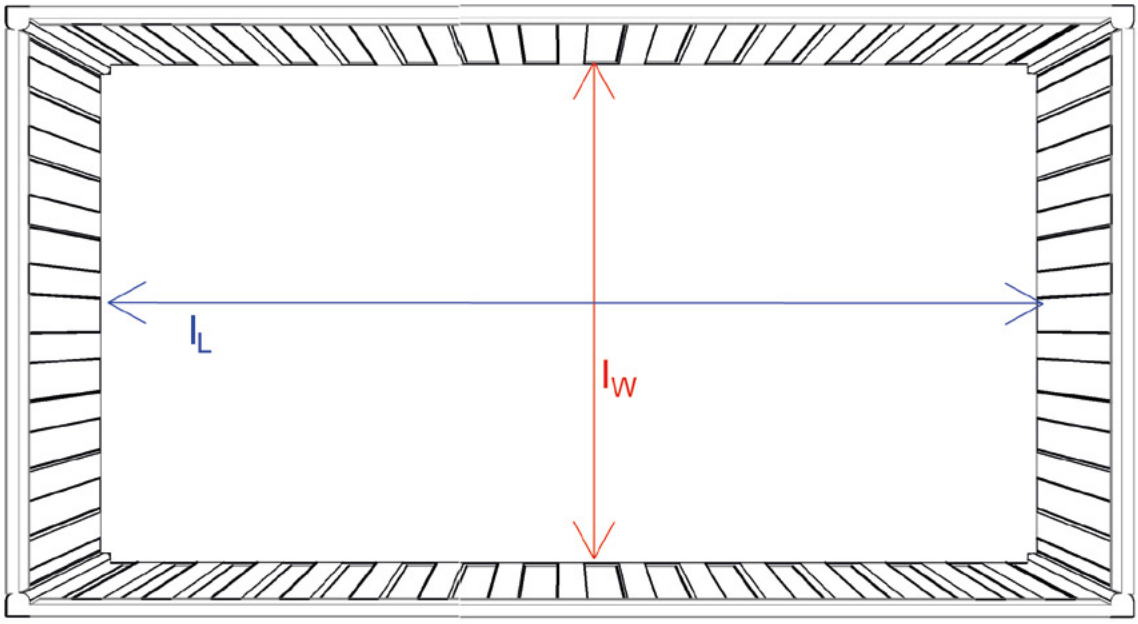
**V-shaped opening:** opening with the apex downwards and an included angle of less than 60°. See Figure 22 of ANNEX III.

## ANNEX II. ABBREVIATIONS

| ABBREVIATIONS | |
|---|---|
| $l_L$ | Internal length. |
| $l_w$ | Internal width. |
| $D_{sm}$ | The vertical distance between the top of the mattress base and the top edge of the lowest side or end. |
| S | Sleeping surface area. |
| $D_m$ | Distance between accessible structural members. |
| $D_{br}$ | The distance between the floor and the bottom rail of the dropside at its lowest point of travel. |
| $D_{grbp}$ | The distance between the dropside guide rod and bed post. |
| h | Diamenter of holes, gaps, openings, small openings, assembly holes, etc. |
| $D_{bse}$ | Distance between the minicot/cot base and the sides or ends of the minicot/cot. |
| $D_s$ | Distance between adjacent slats of the mattress support. |
| $O_p$ | Openings between the base and the sides and ends. |
| $O_{bs}$ | Openings in the mattress base. |
| $G_{gse}$ | Open-ended gap formed at the top of filler bars and panel shall be joined at or near the top by a cross member that join on both sides. |
| $A_o$ | Accessible opening. |
| t | Thickness of the mattress. |
| $g_1$ | Gap formed between the mattress and the minicot sides and ends, which is created by pushing the mattress fully over to one side or end of the article. |
| $g_2$ | Gap formed between the mattress and the minicot sides and ends when the mattress is centered in the article. |
| $R_1$, $R_2$, x | Required radius and chamfer of edges and corners. |
| $H_p$ | Height of the protrusion. |
| $H_{cp1}$ | Height between the upper surface of the highest side or end of the cot/minicot and the highest point of the corner post. |
| $L_{cs}$ | Length of cords, straps or another similar item. |
| $S_{su}$ | Hazardous scissoring points within the protected volume. |
| $S_{ch}$ | Hazardous compression points within the protected volume. |
| $S_{SP}$ | Space formed between accessible shear and squeeze points. |
| $O_{gae}$ | Opening between frame and body of the minicot. |
| $S_{GL}$ | Distance between guide rod and minicot column of lifting side plate. |
| $\alpha_{mb}$ | Angle of the mattress support/mattress base. |
| $\alpha_{max}$ | Maximum sideways angle of minicots. |
| $\alpha_{fsm}$ | Angle of Folding or segmented mattress. |
| $H_{md}$ | Height the maximum flection of the mattress base. |
| $H_{bs}$ | Distance from the highest surface of the mattress to the top of the drop side. (the drop side shall be is in its lowest position and the mattress or mattress base, if adjustable, is in its highest position). |
| $A_{hm}$ | Openings in the mesh of the sides and ends. |
| $G_{cb}$ | All gaps and openings accessible from the inside of the minicot/minicot. |
| $B_{sd}$ | Distance between the bedside sleeper and the test platform. |
| $C_{ø}$ | Diameter of the castor/wheels. |
| $H_{fh}$ | The maximum overall height of the carry cot measured. |
| $\alpha_{max}$ | Maximum angle for reclinable carry cots to the horizontal. |
| $O_h$ | Openings attachment of the handles. |
| d | Depth of the holes or gaps. |
| $D_{ACR}$ | Horizontal distance between the front surface of the backrest and the active crotch restraint. |
| $D_{PCR}$ | Horizontal distance between the front surface of the backrest and the passive crotch restraint. |

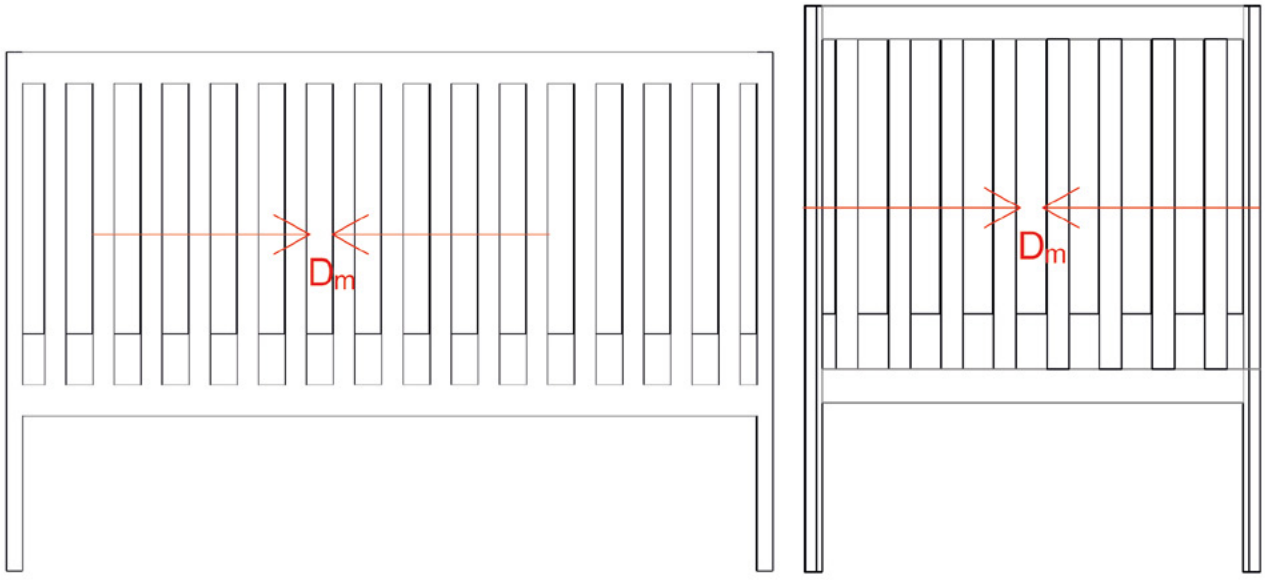
| | |
|---|---|
| $D_{FTS}$ | Horizontal distance between the front surface of the backrest and the front torso support or horizontal member. |
| $H_{LP}$ | Height of the lateral protection. |
| $L_{LP}$ | Length of the lateral protection measured from the front surface of the backrest. |
| $A_{BR}$ | Angle of the backrest. |
| $L_{BR}$ | Length of the backrest. |
| $S_{CS}$ | Space formed between spirals of coil springs. |
| $s_d$ | Seat depth. |
| $\alpha_{LF}$ | Angle between foot and leg probe. |
| $X_s$ | Horizontal distance from the inside edge of the lateral protection to the outermost bottom part of the leg. |
| $h_s$ | Height of the uppermost surface of the tray or arm. |
| $b_s$ | Distance between the outermost points of the base of the high chair in a front view. |
| $x_f$ | Horizontal distance between the front edge of the seat and the outermost point of the frontal legs. |
| $h_f$ | Height of the uppermost surface of the front part of the high chair. |
| $S_d$ | Seat depth. Horizontal length in front to back direction of the seat. |
| $L_1$ | Length of changing area for type 1 changing units. |
| $W_1$ | Width of changing area for type 1 changing units. |
| $L_2$ | Length of changing area for type 2 changing units. |
| $W_2$ | Width of changing area for type 2 changing units. |
| $ø_{wire}$ | Diameter of the wires of mattress support which is made of metallic mesh. |
| $D_1$ | Distance between the upper surface of the cot base (or foothold) and the lowest point on the upper edge of the sides and ends of the cot, when the cot base or mattress support is in its lowest position. |
| $D_2$ | Distance between the upper surface of the cot base (or foothold) and the lowest point on the upper edge of the sides and ends of the cot, when the cot base or mattress support is in its hightest position. |
| $D_{trse}$ | Distance between the uppers surfaces of the top rails of the sides and ends of the cot. |
| $H_{cp2}$ | Height between the upper surface of the lowest side or end of the cot and the highest point of the corner post. |

## ANNEX III. GRAPHIC ILLUSTRATIONS



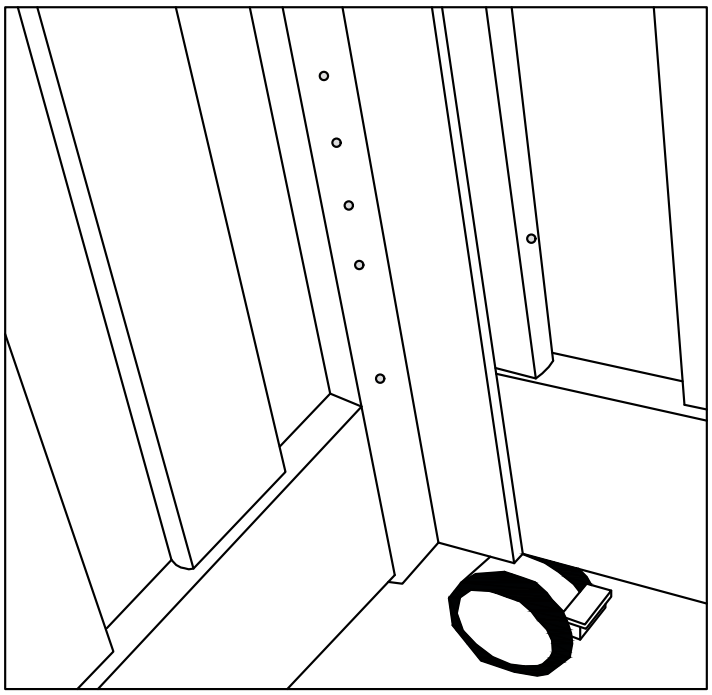

IW: Internal width of the cot (measured at the level of the cot base in each of its adjustment position)
IL: Internal length of the cot (measured at the level of the cot base in each of its adjustment position)
Internal surface of the cot (S) described as the inner area of the cot ( S= IW x IL)

***Figure 16**. Cot dimensions.*



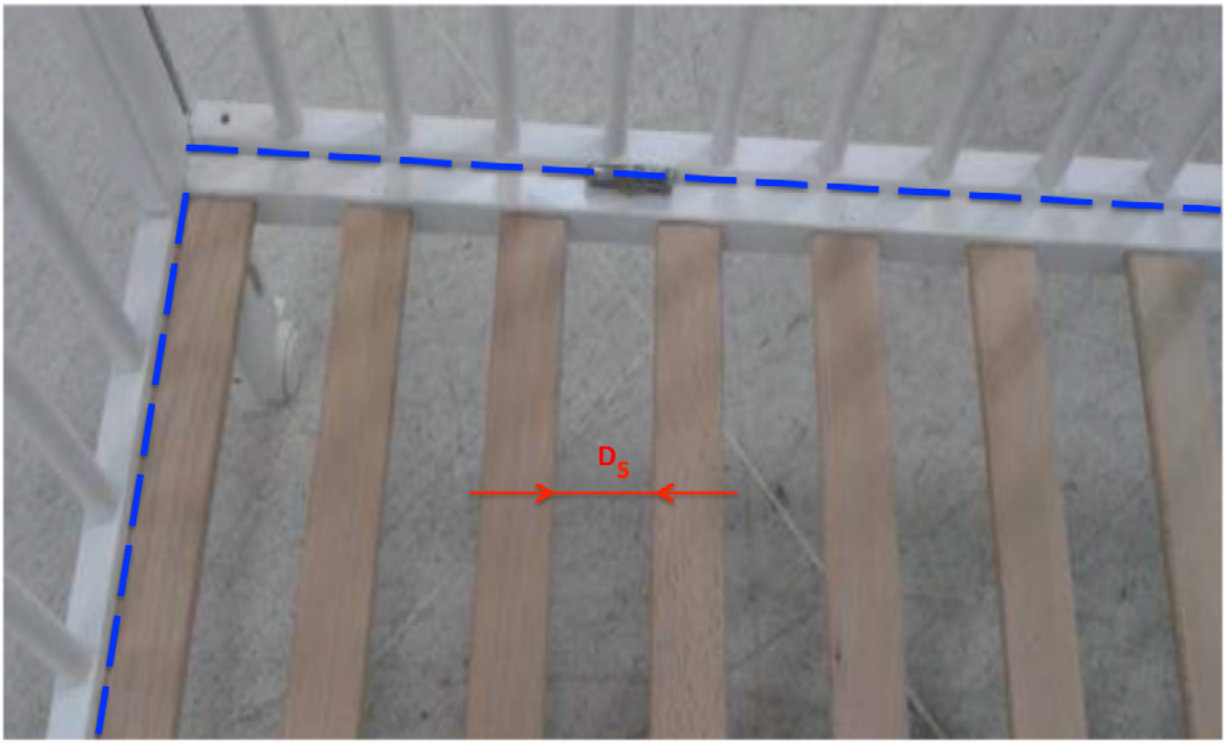

$D_m$: Distance between adjacent slats

***Figure 17**. Distance between accessible structural members.*



The holes used to place the cot base in each of its adjustment positions are a clear example of assembly holes

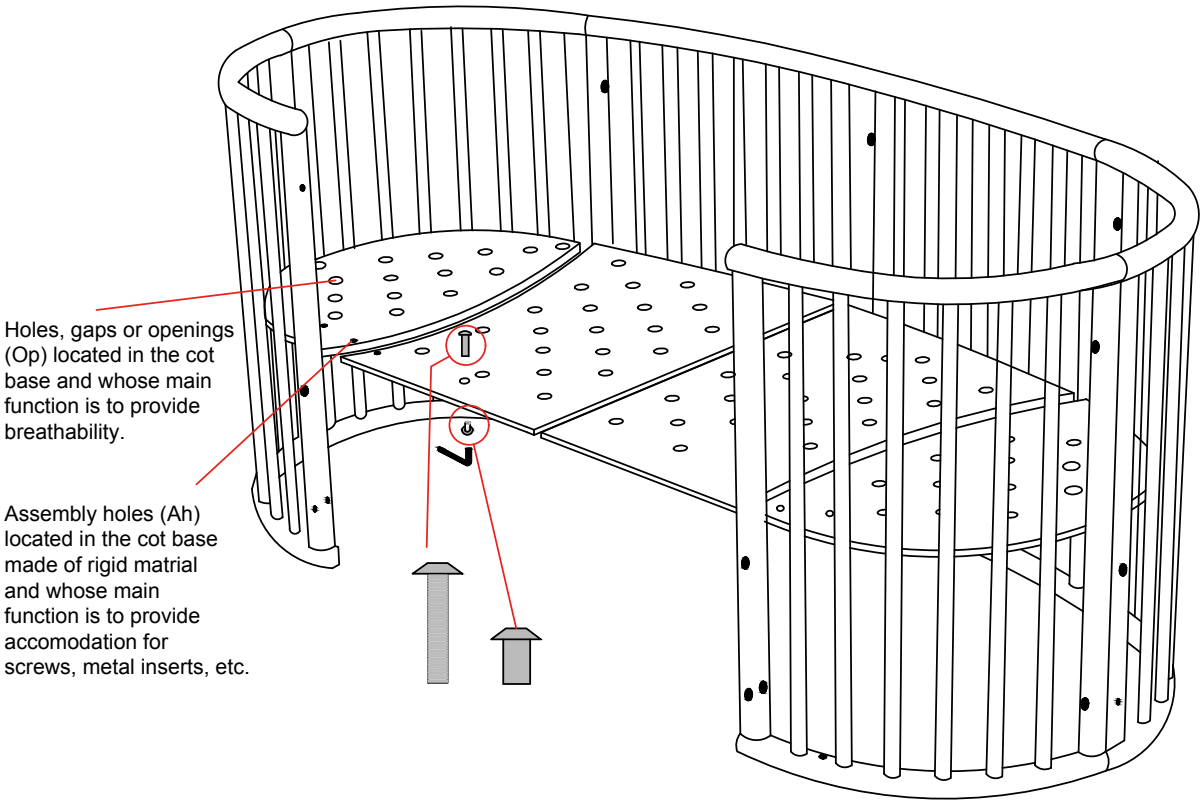
***Figure 18**. Assembly holes.*




$D_{bse}$ : Distance between the cot base and the sides/ends of the cot

$D_s$ : Distance between two adjacent slats of the cot base

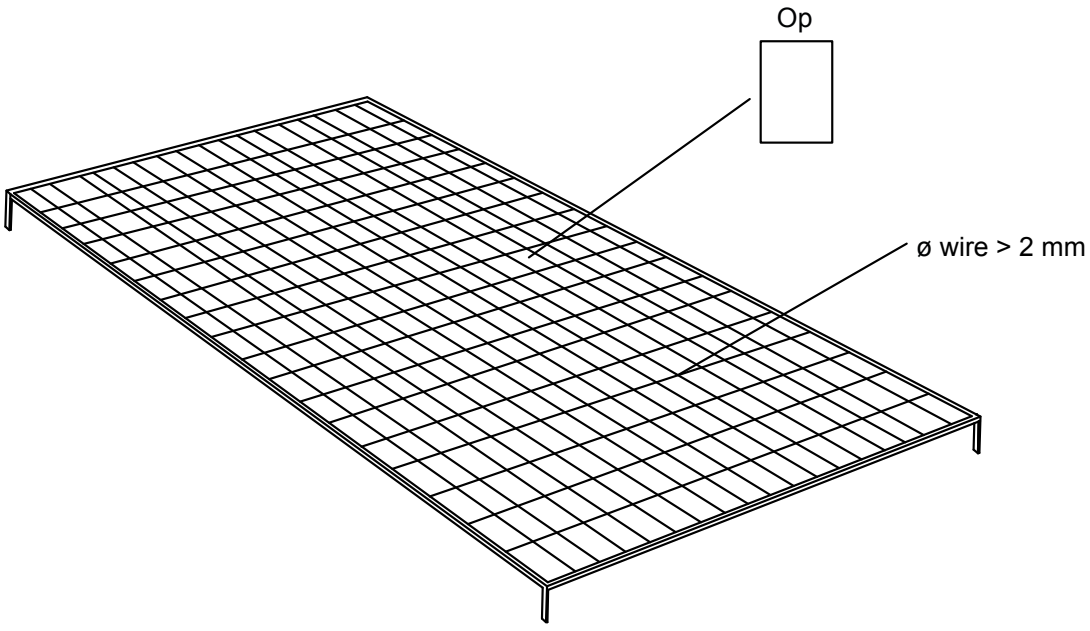
***Figure 19**. Distance between the cot base and the sides/ends of the cot. Distance between slats of the cot base.*




$A_h$: Allowed dimensions of the assembly holes located in the cot made of rigid material

$O_p$: Allowed dimensions of the rest of the holes, gaps or opening located in the cot base made of rigid material

***Figure 20**. Cot base made of rigid material (e.g. wood).*




Op: Alloved dimensions of the openings located in the cot base made of metallic mesh

ø wire: Diameter of the metallic wires forming part of the cot base made of the metalic mesh

***Figure 21**. Cot base made of metallic mesh.*

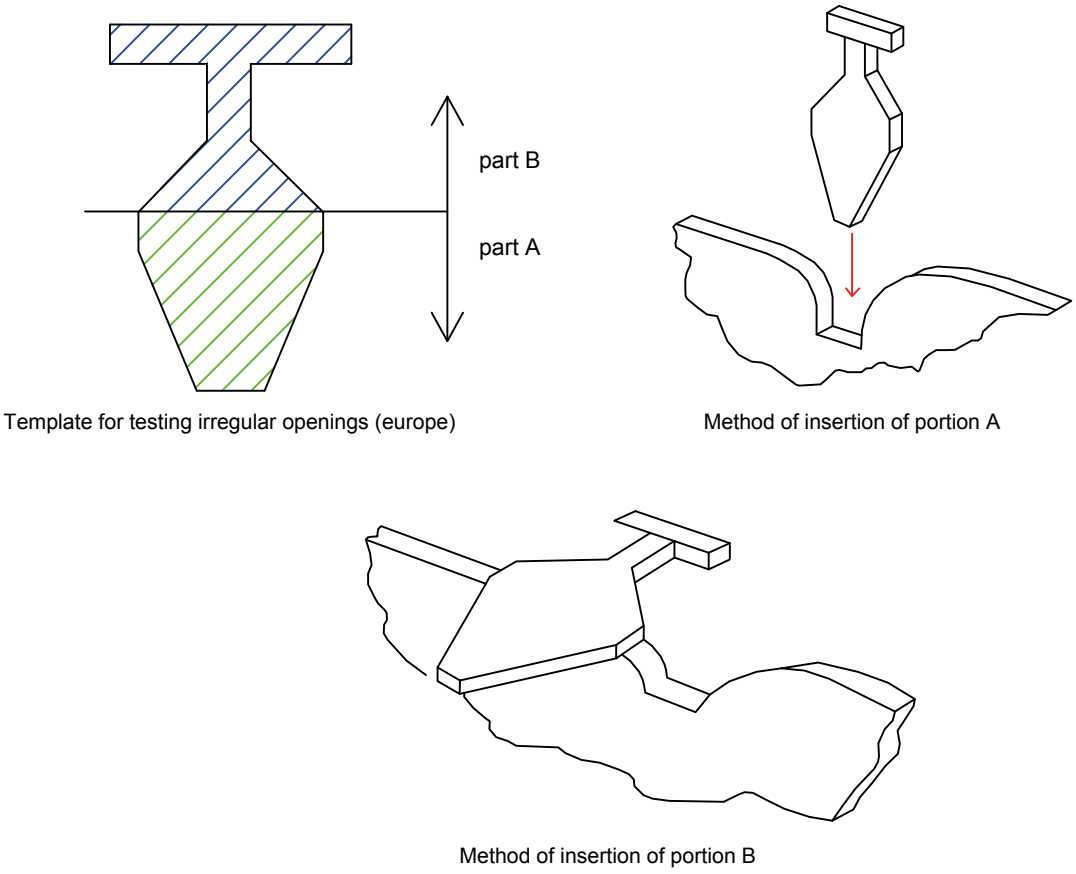



***Figure 22**. Example of irregular shaped openings (exterior of the cot).*

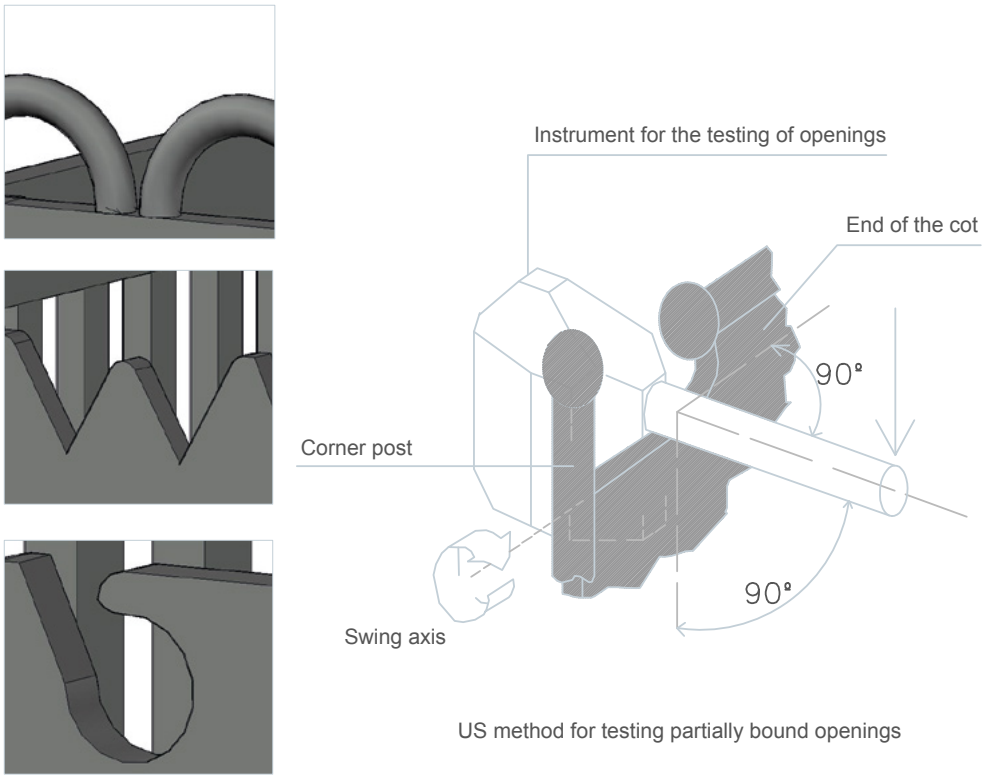



***Figure 23**. Example of partially bound openings (cut-outs).*

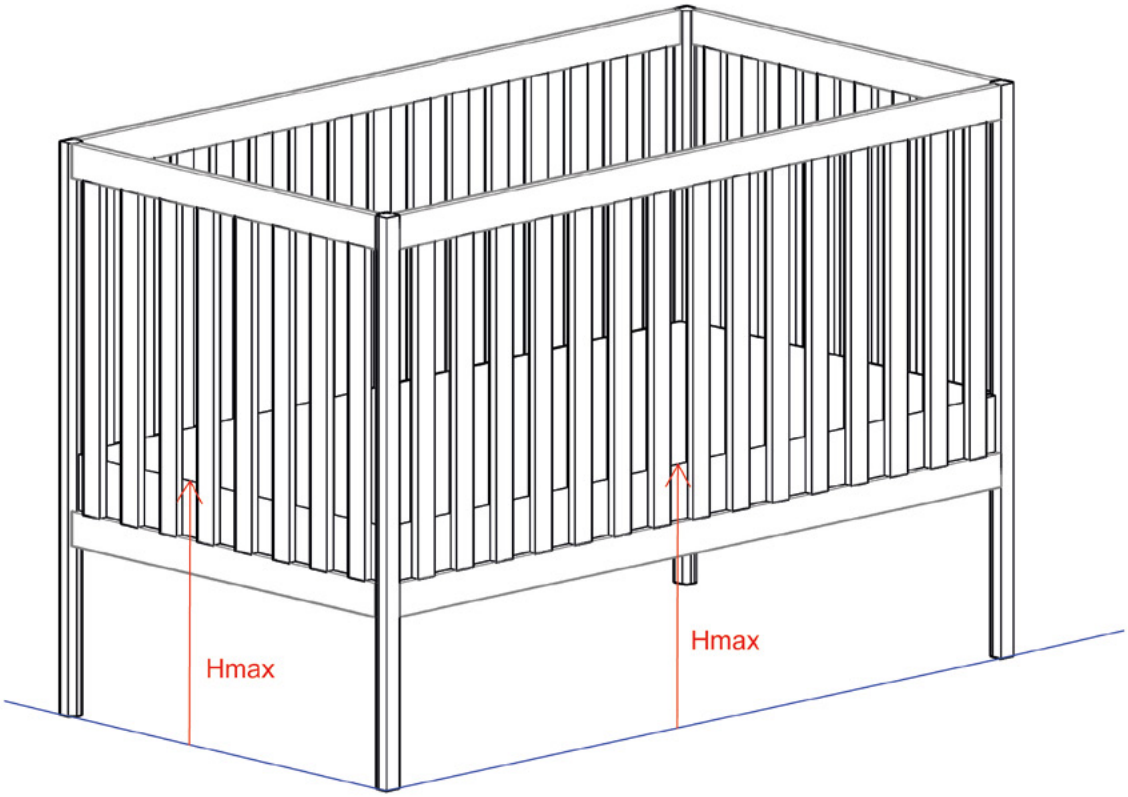



***Figure 24**. Vertical distance between the floor and the cot base.*

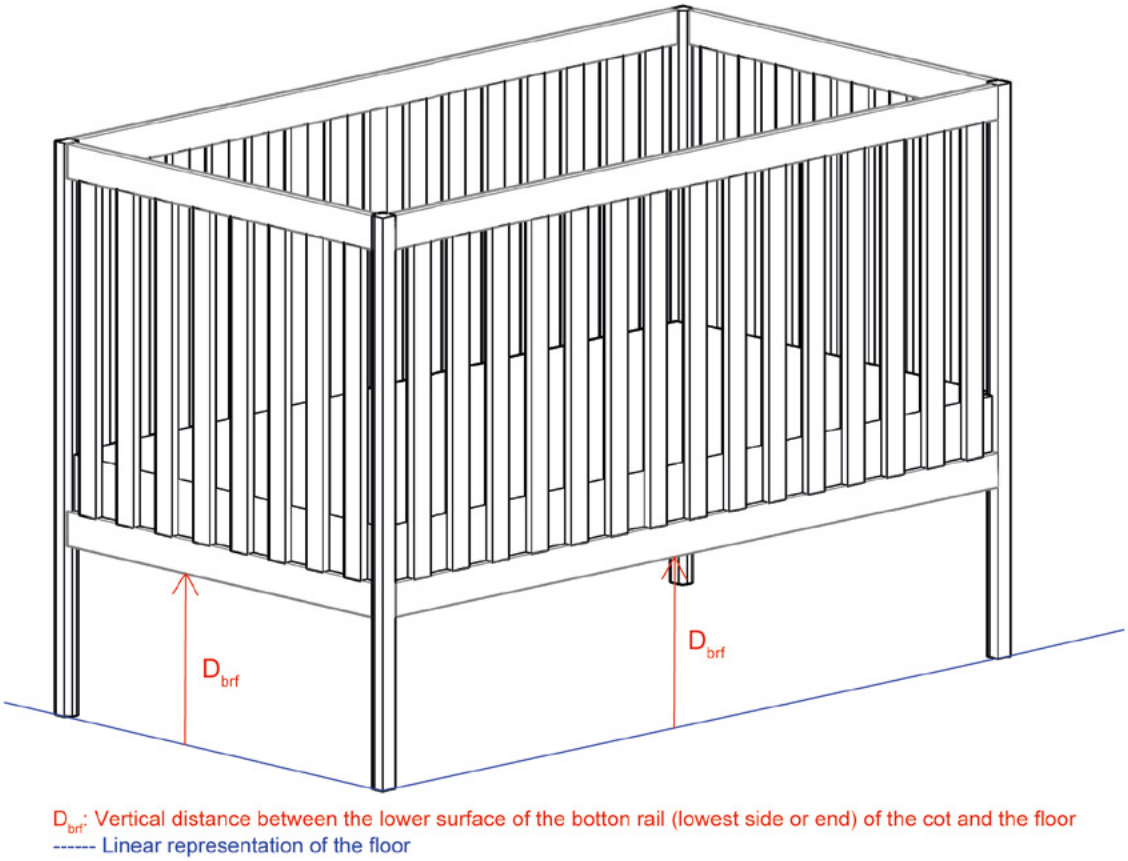
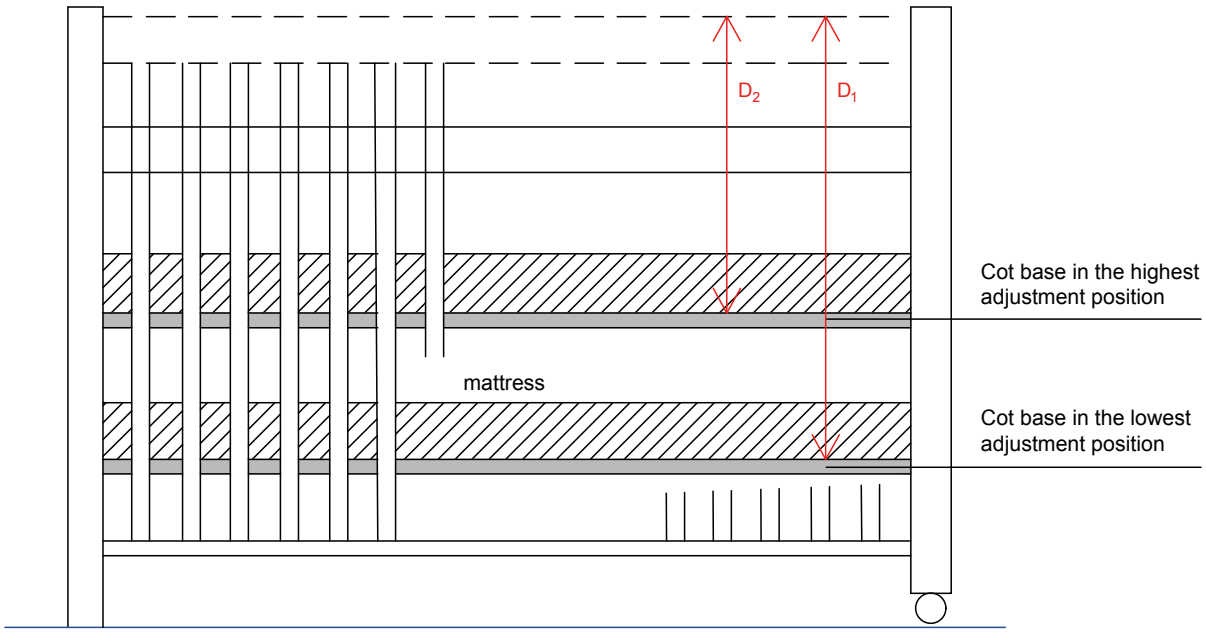



***Figure 25**. Height between the floor and the lower surface of sides/ends.*




D: distance the upper of the cot base (or foothold) and the lowest point on the upper edge of the sides and ends of the cot

- - - - - Linear representation of the floor

***Figure 26**. Distance between footholds and the top surface of sides/ends.*

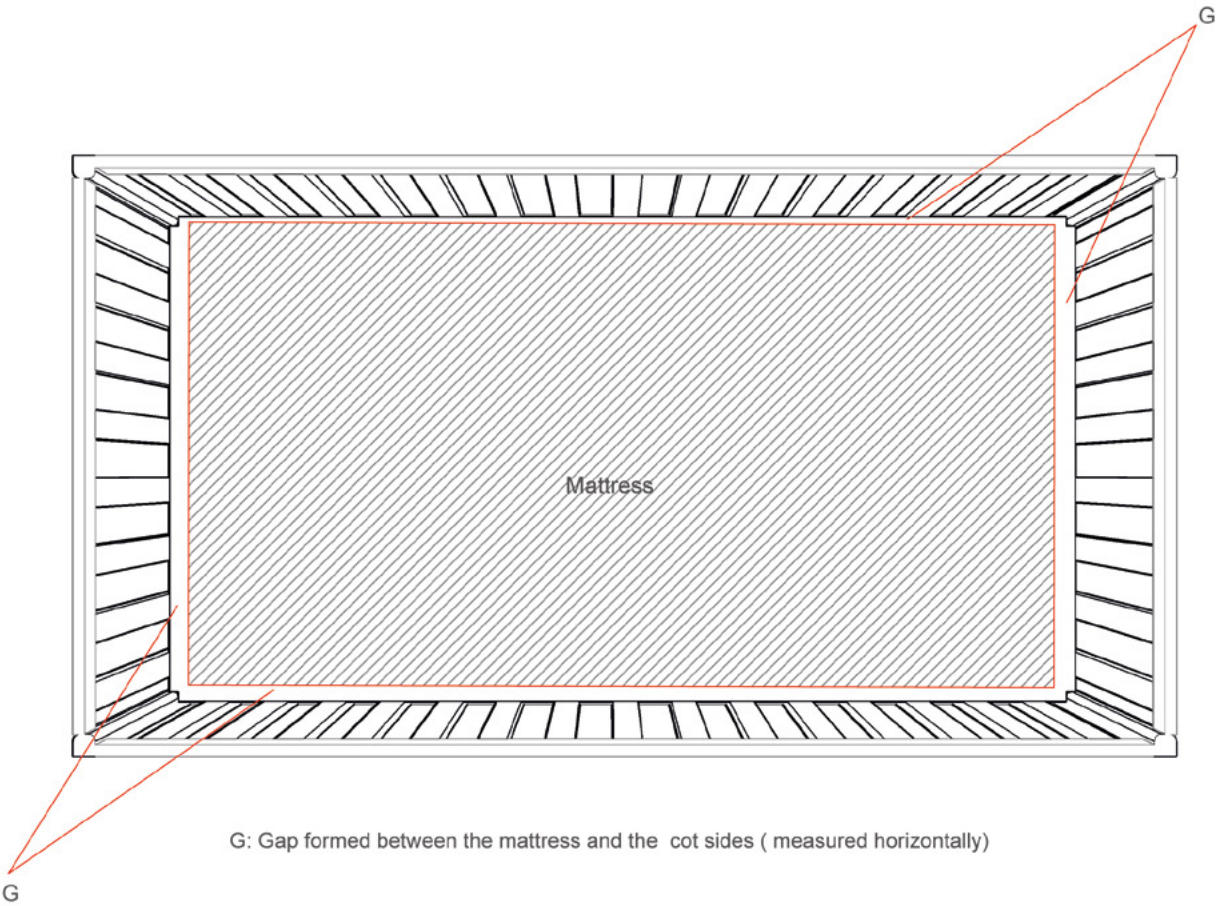
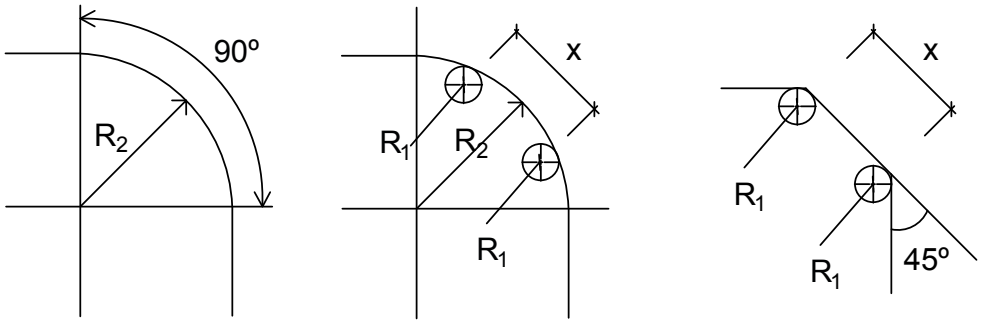
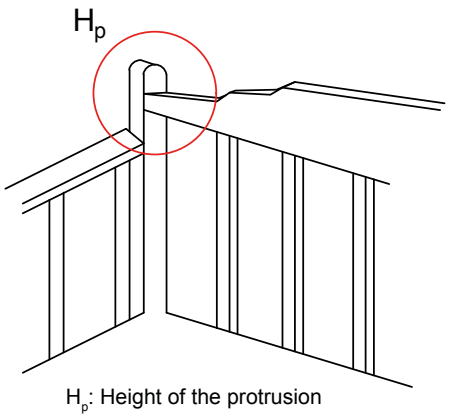



***Figure 27**. Gap formed between the mattress and the cot sides and ends.*

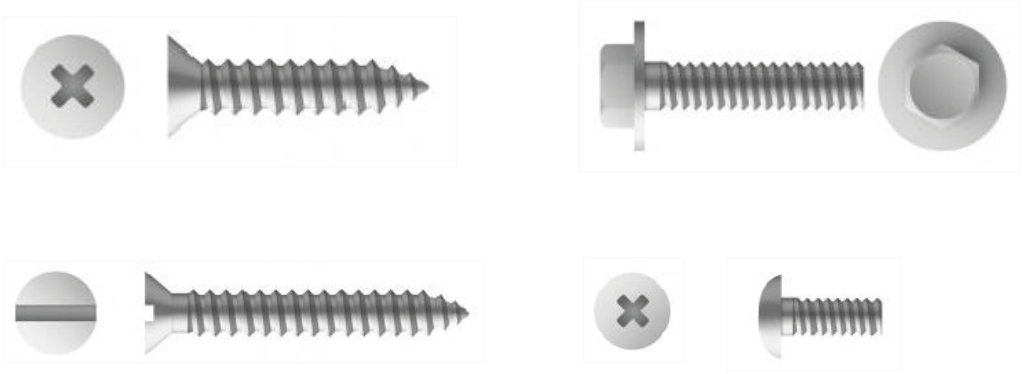



$R_1$, $R_2$ Required radius and chamfer of edges and corner




$H_p$: Height of the protrusion

*Figure 28. Edges and protruding parts.*

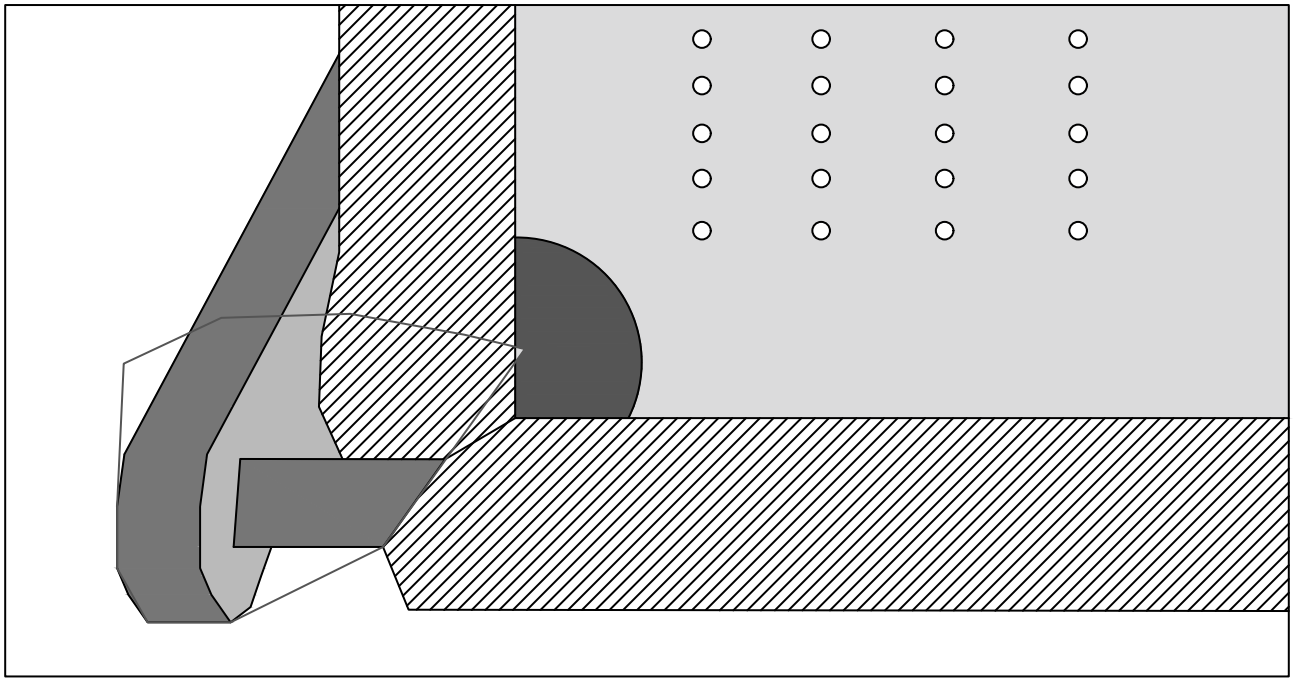


Wood screws
Screws with a somooth shank and tapered point for use in wood.
Abbreviated WS

Self Drilling SMS
A sheet metal crew with a self drilling point

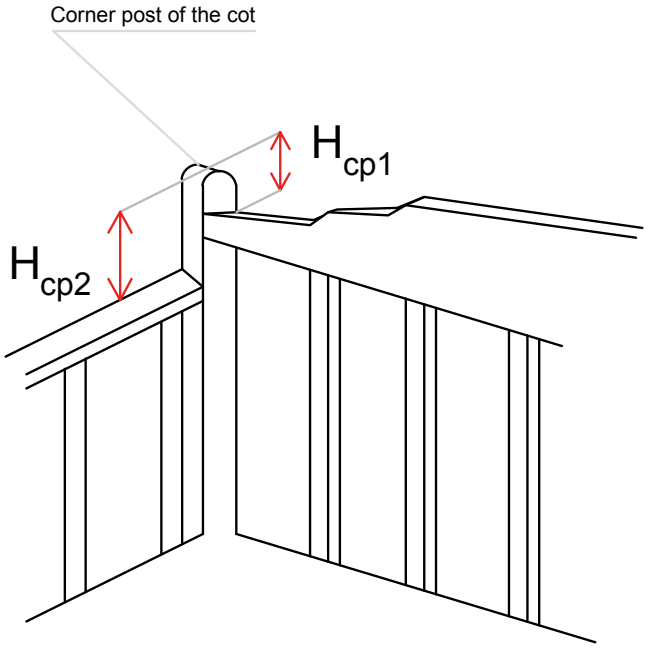
Examples of self-tapping screws

*Figure 29. Self-tapping screws.*



Test method for the determination of snag points (Europe)

***Figure 30**. Snag points.*




$H_{cp}$: Allowed dimensions of the corner posts of the cot

***Figure 31**. Corner posts.*

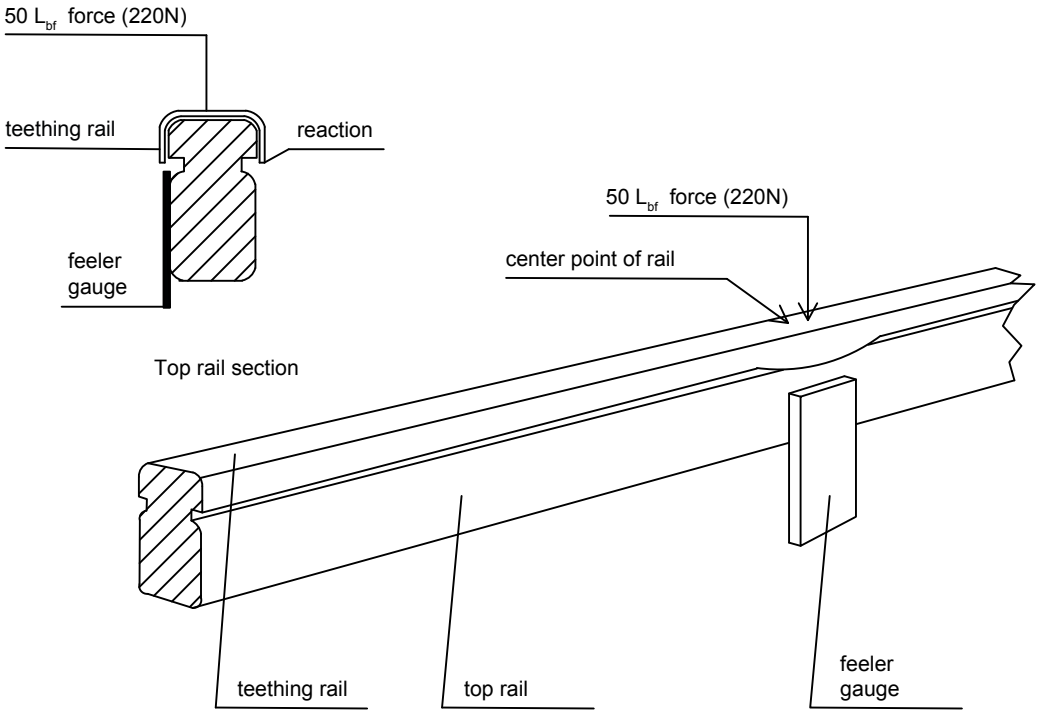



***Figure 32**. Plastic teething rail.*

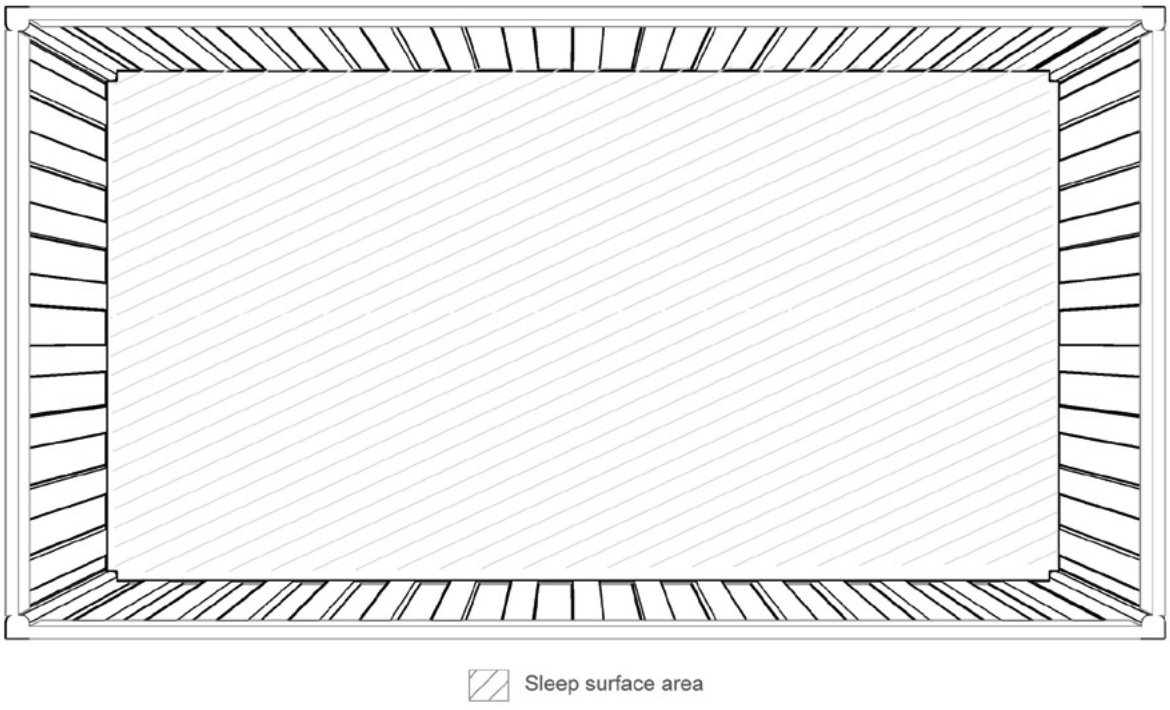
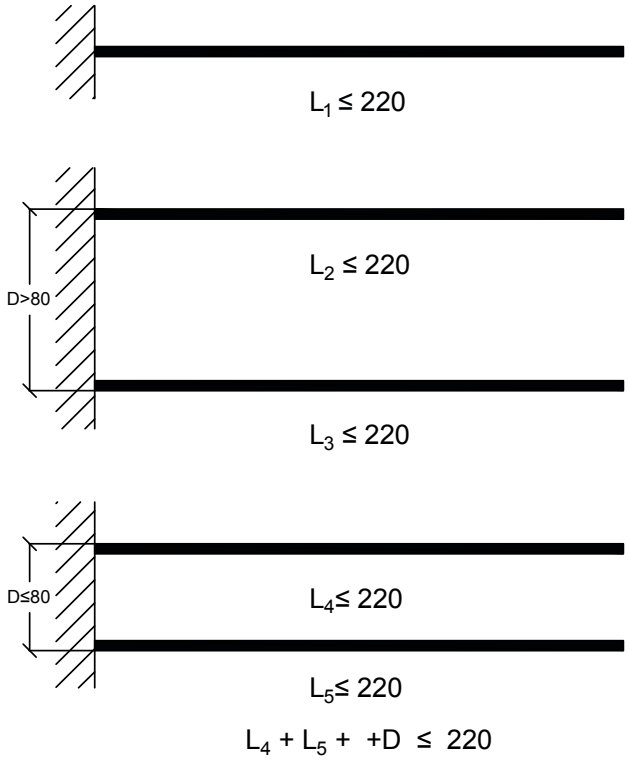



***Figure 33**. Dimension.*




$L_x$: length of the single cord (mm)

D: distance between the attachments (mm)

***Figure 34**. Length of cords, ribbons and similars.*

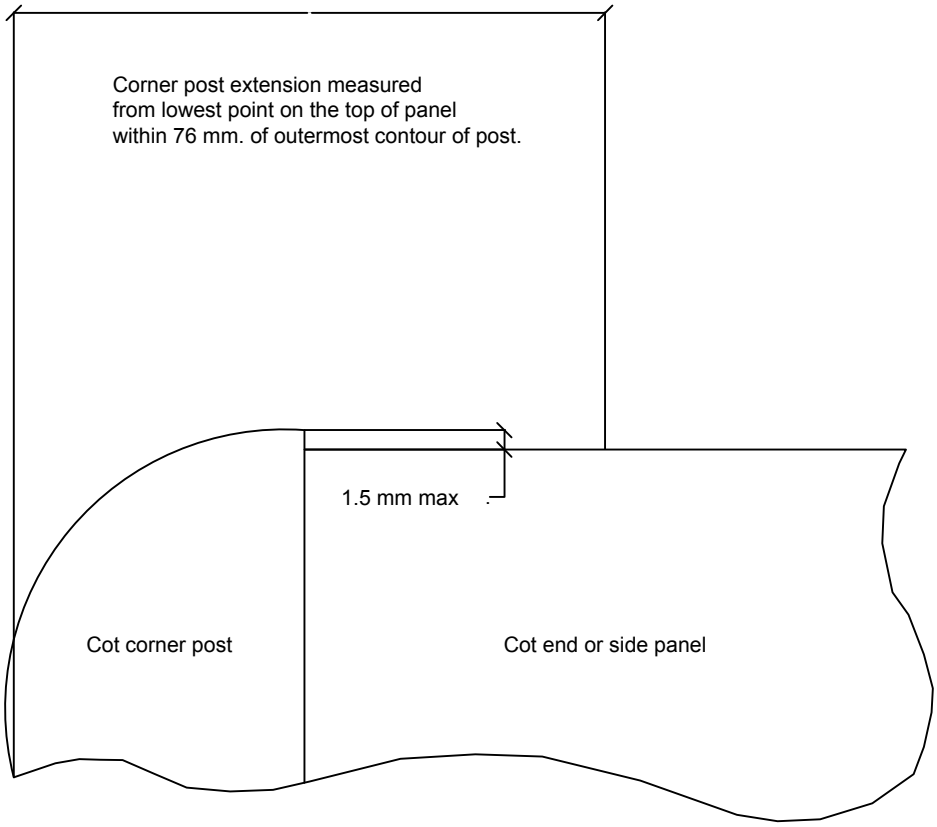
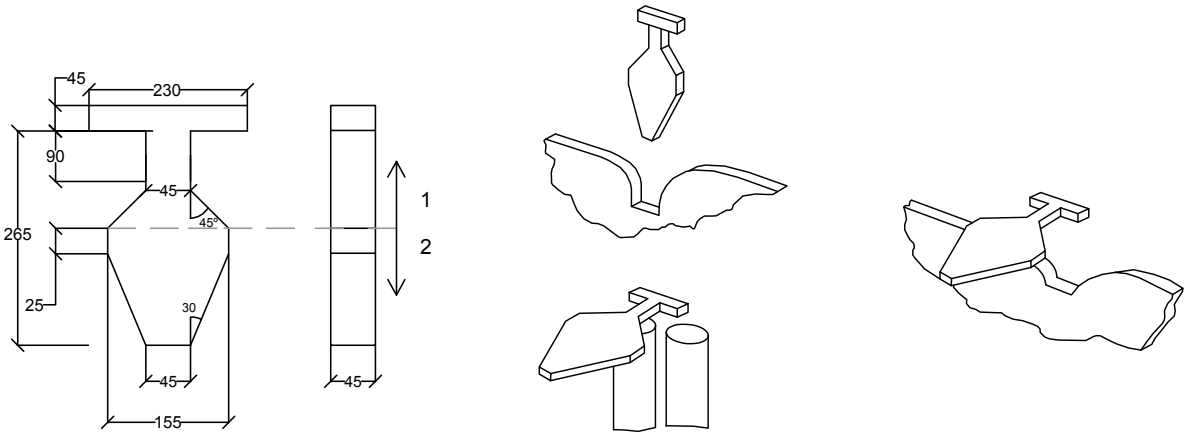



***Figure 35**. Corner post.*




Template for testing irregular openings (mm) | Method of insertion of portion B | Method of insertion of portion A

***Figure 36**. Example of irregular shaped openings.*

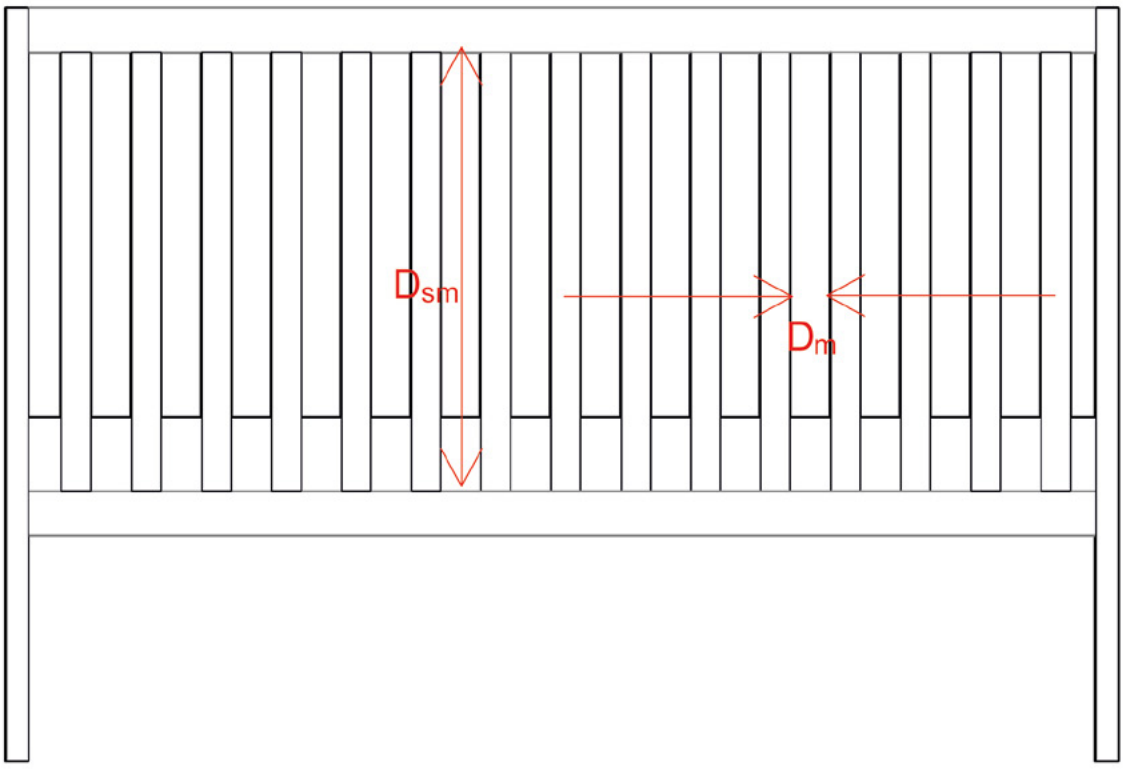



***Figure 37**. $D_{sm}$ =Distance between the top of the mattress base and the top edge of the lowest side or end.*

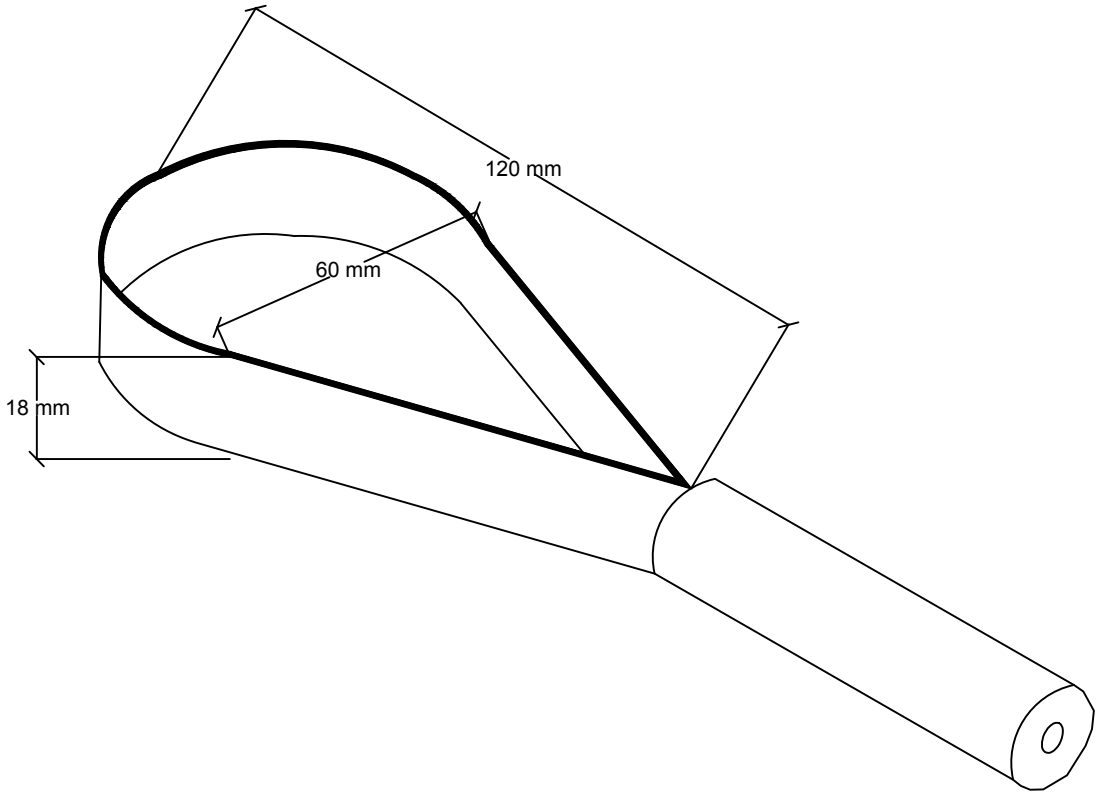



***Figure 38**. Entanglement tester.*

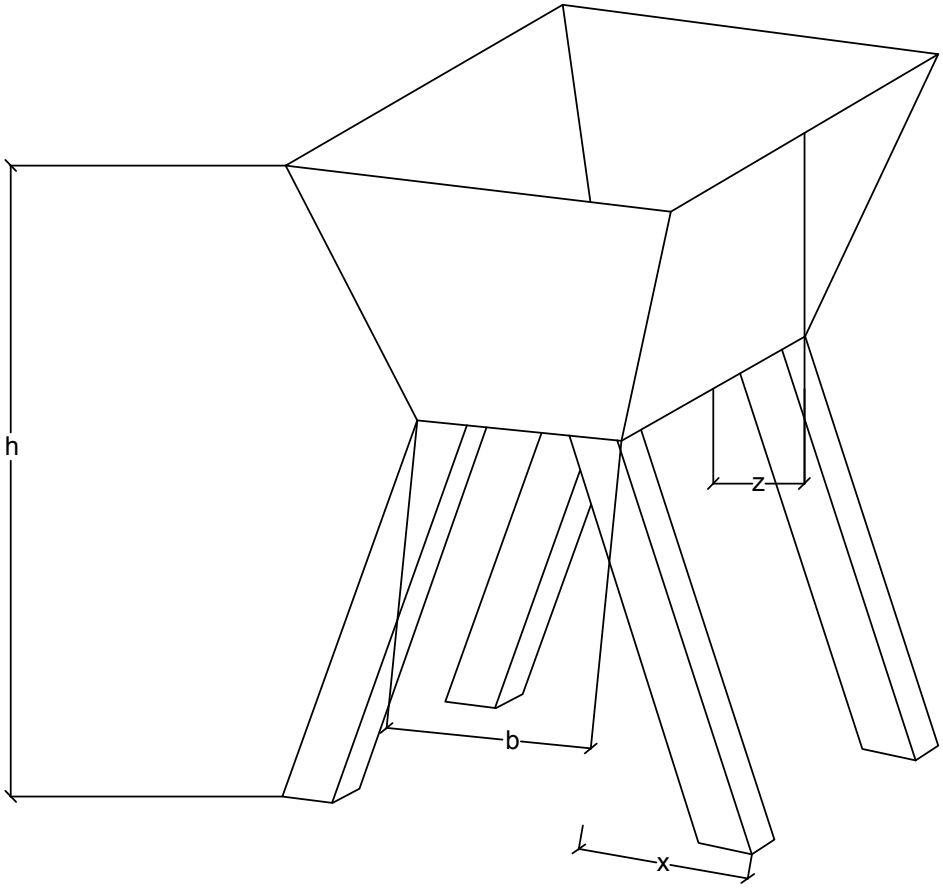



***Figure 39**. Stability parameters.*

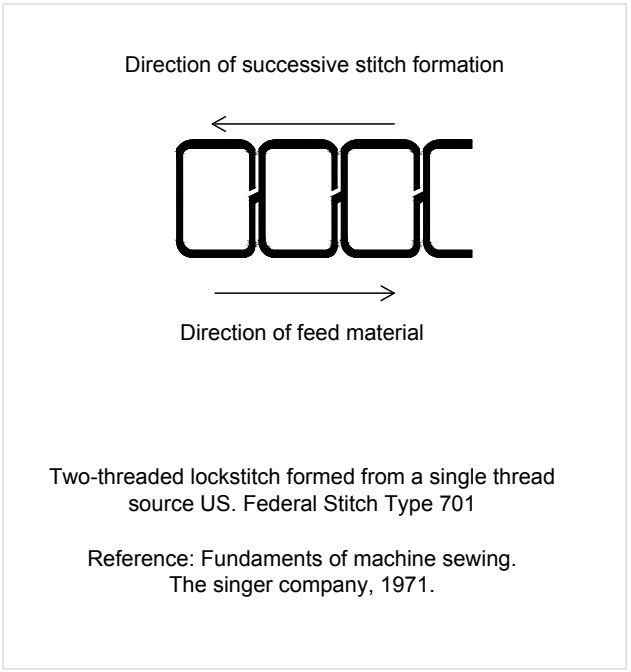



*Figure 40. Lock stitching.*

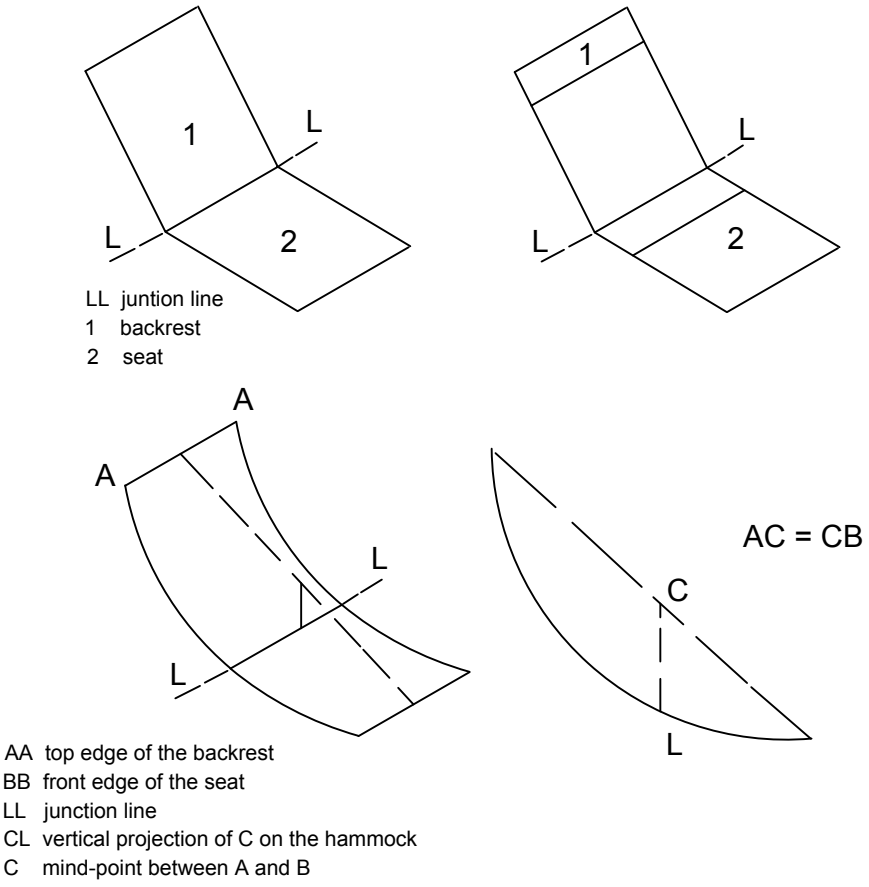



*Figure 41. Determination of juntion line.*

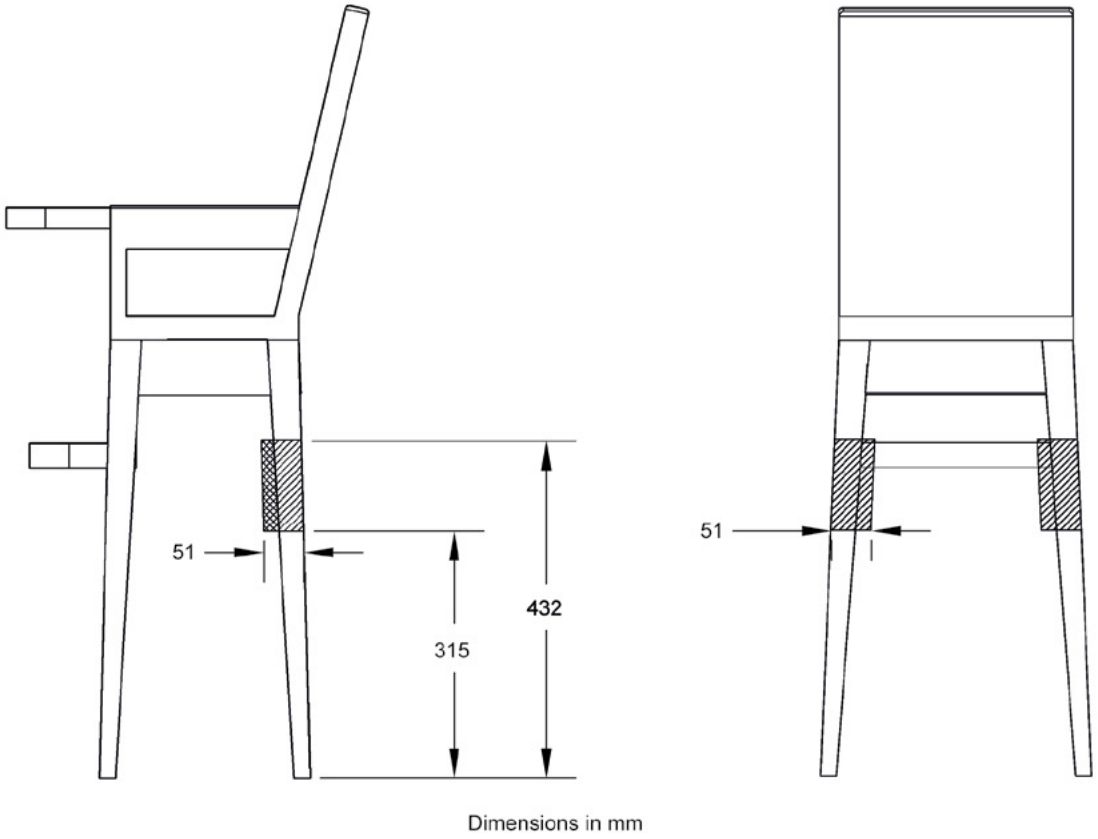



*Figure 42. Protrusion evaluation zone on the side and back of the high chair.*

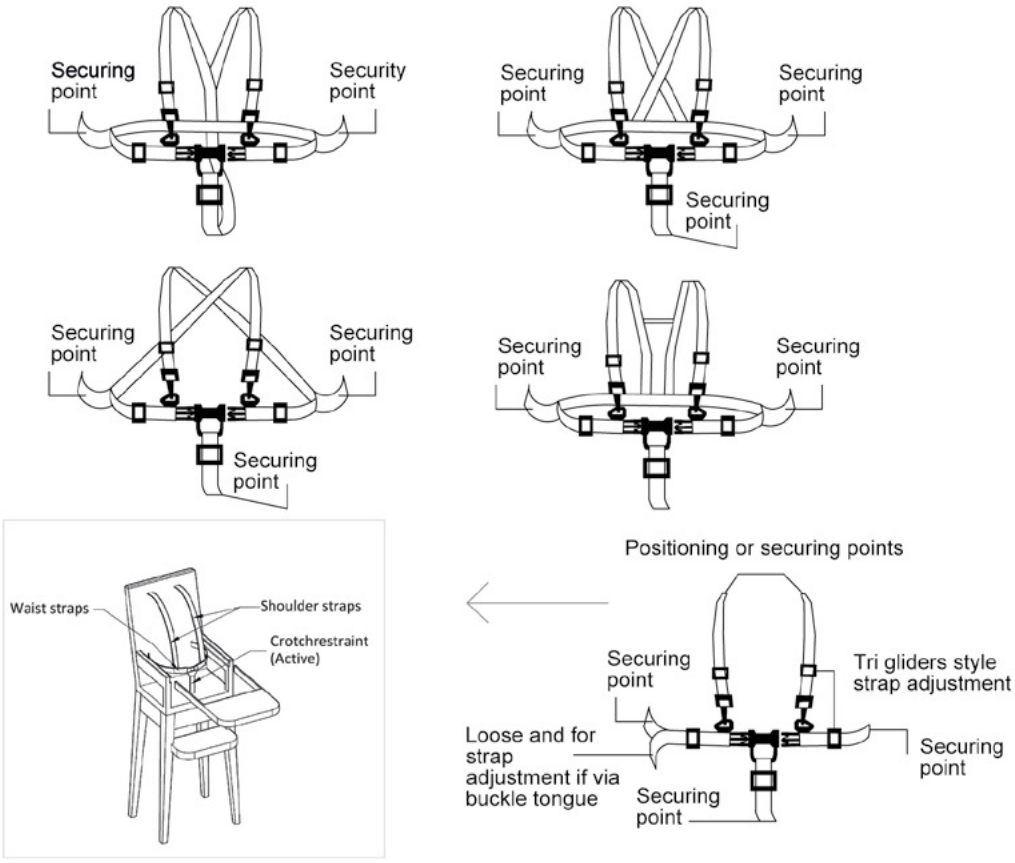



*Figure 43. Example of 5 point harness assembly and example of a full body harness.*

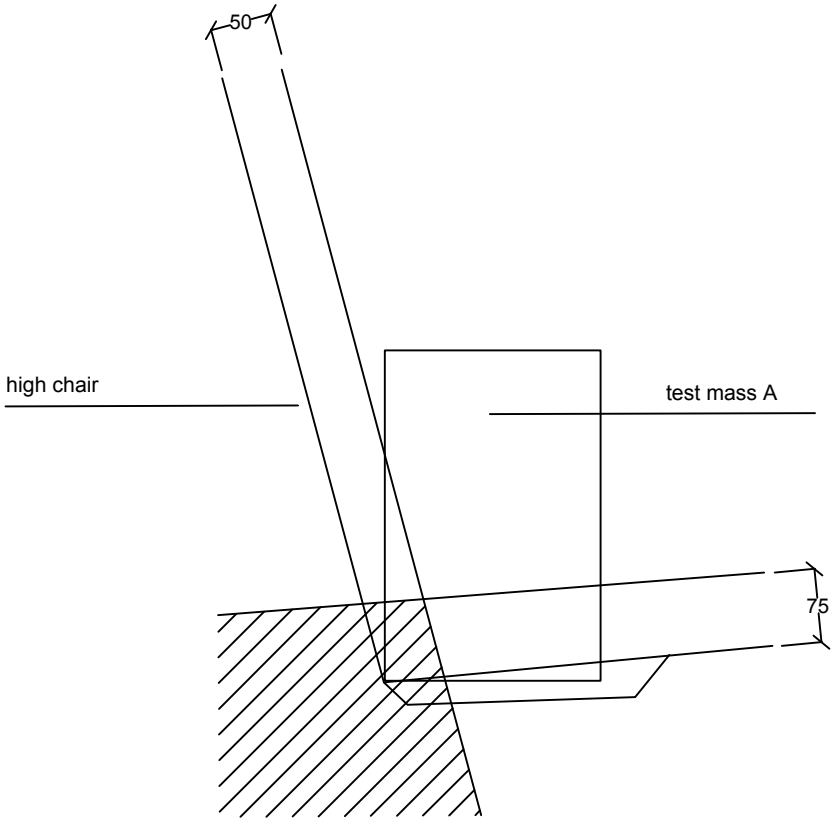



*Figure 44. Location of the attachment points for additional harness. Test mass A described in EN 14988.*

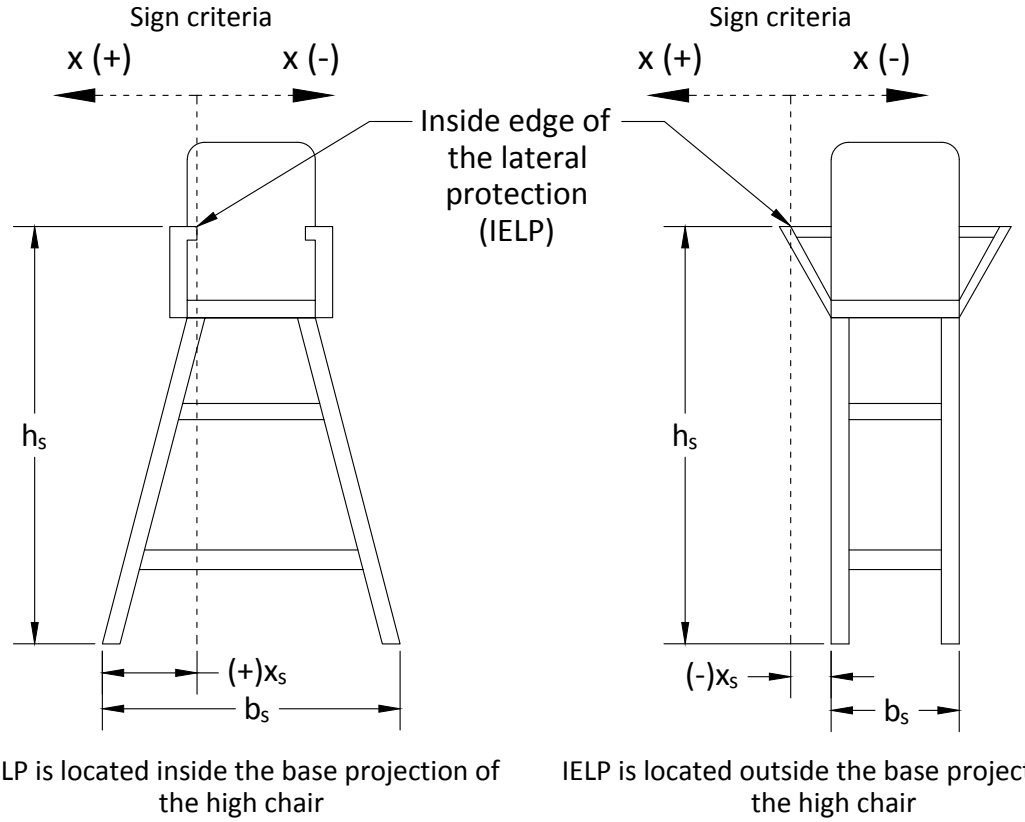



*Figure 45. Sideways stability parameters. Sign criteria for the value "x" depending on the position of the inside edge of the lateral protection with respect to the outermost point of the base.*

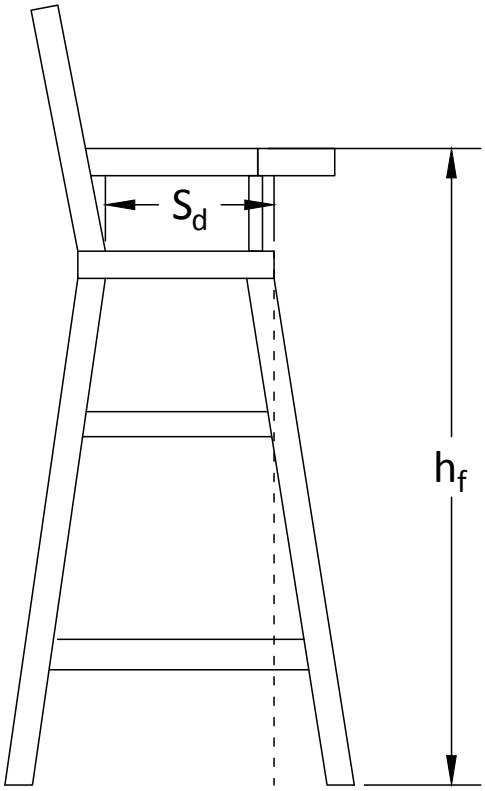



***Figure 46**. Forwards stability parameters.*

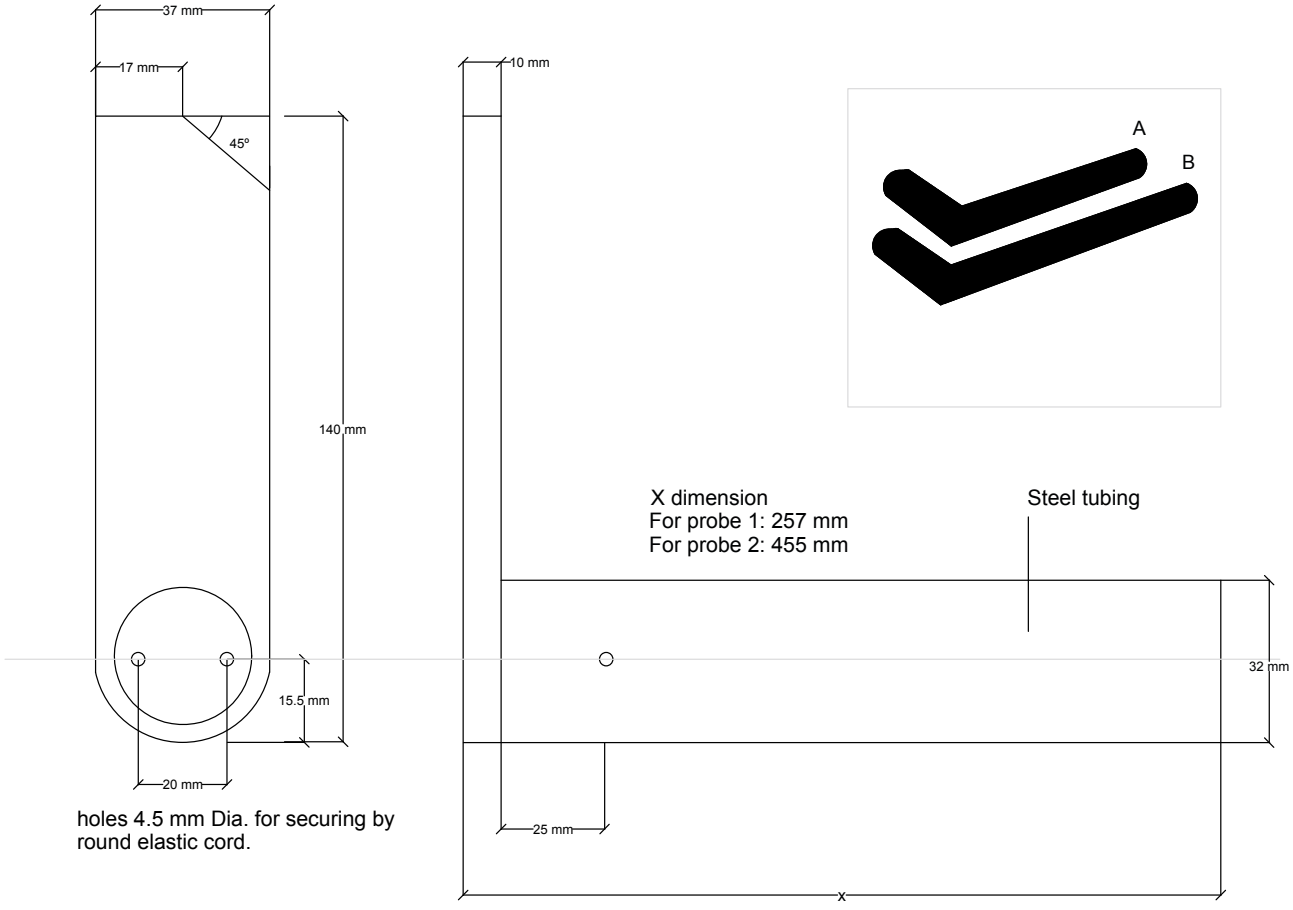



***Figure 47**. Leg/foot probe.*

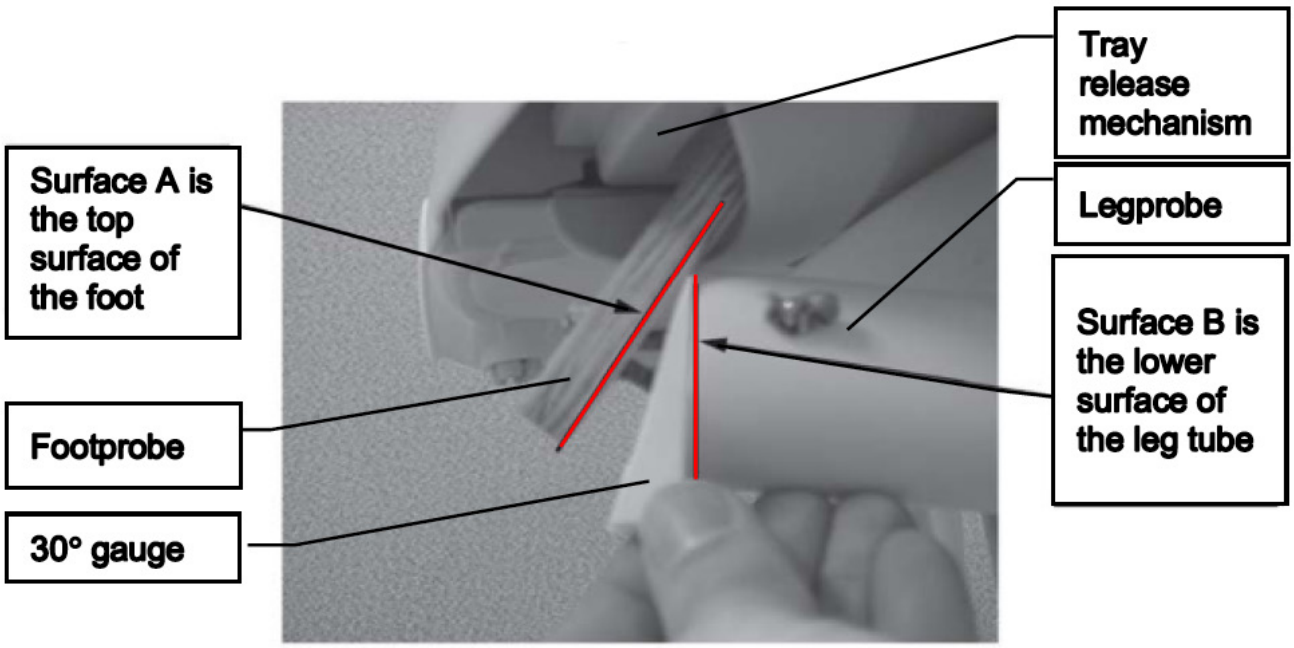



*Figure 48. Angle between foot and leg probe.*

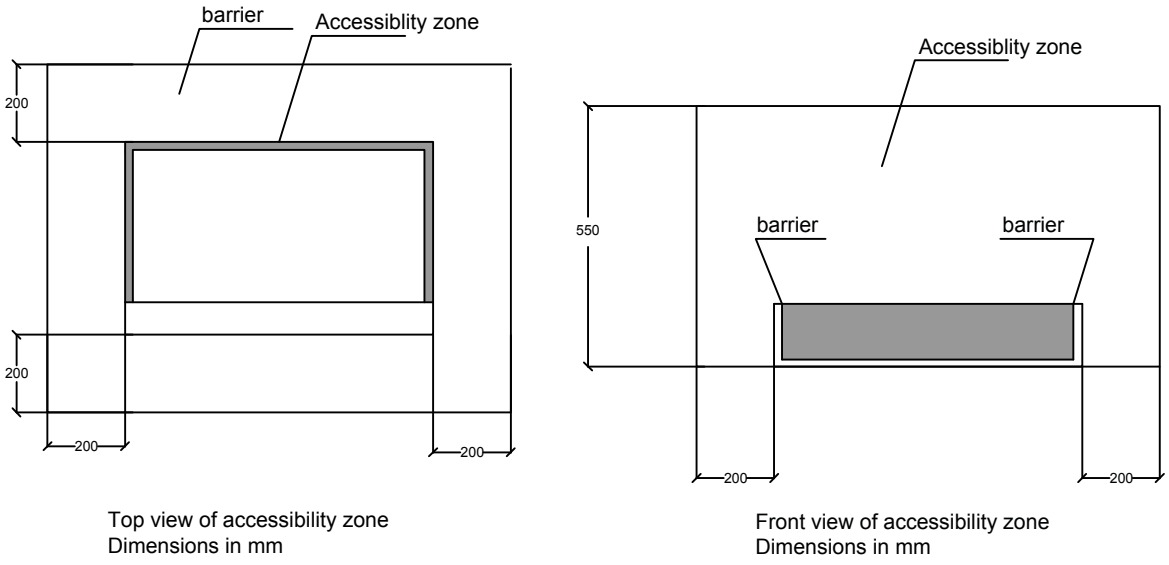



*Figure 49. Top and front view of accessibility zone.*

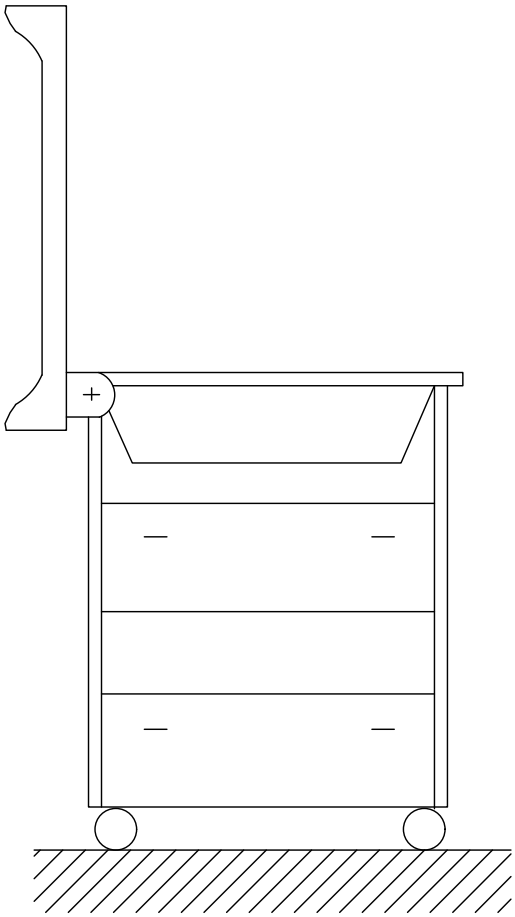


*Figure 50. Changing board flap.*

## ANNEX IV. COMMITMENT TO COMPLY WITH INDITEX GROUP´S i+CCF

I hereby confirm that:

1) We have received the Inditex Precautions and Limits for Users Safety for Child Care Furniture (hereinafter, **i+CCF**), we have read it and thoroughly understand its implications.

2) We acknowledge that compliance with **i+CCF** is a contractual obligation and undertake, accordingly, to meet the **i+CCF** requirements in all orders involving production, marketing or distribution placed by any of the formats of the Inditex Group.

3) We undertake to disclose and formally demand **i+CCF** implications to the whole production line.

4) The Inditex Group:

   · Reserves the right to check: i) compliance with **i+CCF** regarding any goods supplied, by any method, at any time, and/or at any stage of the production, marketing or distribution processes, and ii) the appropriate disclosure of **i+CCF**.

   · Reserves the right to cancel any order for any goods where a non-compliance with **i+CCF** regarding any test and/or inspection has been established.

   · Reserves the right to return any orders already delivered where a non-compliance with **i+CCF** regarding any test and/or inspection has been established.

   · Reserves the right to cancel or destroy, or to order destruction of the goods subject to the cancelled order, subject to the fact that the cancellation of the relevant order shall entail the non-existence of the obligation to pay any sum whatsoever for the goods failing to comply with **i+CCF**.

   · Holds the Supplier as solely responsible for any and all damages caused by goods failing to comply with **i+CCF**;

and lastly,

5) We acknowledge that approval of a “sample” and any subsequent “repetition” of goods by the INDITEX Group do not release us from our liability, for the entire production, marketing and distribution processes.

THE SUPPLIER IS RESPONSIBLE FOR ALWAYS REFERRING TO THE LATEST UPDATED VERSION OF THIS DOCUMENT, AVAILABLE AT www.inditex.com.

# NOTES

## NOTES

1 The manufacture of cots with irregular shapes is only permitted within a specific range of dimensional limits (see section III.1.A.1 of this standard).

2 Physical quantity: physical property that can be expressed as the combination of a magnitude expressed by a number. E.g. length, width, height, depth, diameter, radius, surface (length by width), etc.

3 See Figure 16 of Annex 3 of this standard.

4 The manufacture of cots with irregular shapes is not permitted.

5 The manufacture of cots with irregular shapes is allowed.

6 See Figure 17 of Annex 3 of this standard.

7 Inditex internal procedure for the determination of entrapment hazards in holes, gaps, slots or openings accessible to the occupant within the cot.

8 See Figure 18 of Annex 3 of this standard.

9 See Figure 19 of Annex 3 of this standard.

10 The distance must be measured horizontally with the cot base in each of its adjustment positions (if adjustable).

11 The intention of this requirement is to prevent injury to the carer's feet.

12 See Figure 20 of Annex 3 of this standard.

13 See Figure 21 of Annex 3 of this standard.

14 See Figure 22 and Figure 23 of Annex 3 of this standard.

15 See Figure 24 of Annex 3 of this standard. It will be the maximum height permitted, regardless of the adjustment position of the cot base (if adjustable). The distance shall be measured from the floor to the upper surface of the cot base.

16 See Figure 25 of Annex 3 of this standard. The distance shall be measured from the floor to the lower surface of the bottom rail of the lowest side or end of the cot.

17 See Figure 26 of Annex 3 of this standard.

18 The distances D1 and D2 refer to the internal height of the sides and ends of the cot. This distance shall be measured from the upper surface of the cot base, in its lowest adjustment position and without the mattress, or from any element on the sides or ends of the cot to which the child is able to climb, to the lower surface of the top rail of the sides and ends of the cot.

19 The distances specified in Items (1) and (2) are based on the cot having a mattress 100 mm thick. A mattress deeper/thicker than 100 mm shall require a corresponding increase in the required vertical distance.

(i) Thickness of the mattress shall be such that the internal height (between the top surface of the mattress and the lower surface of the top rail of the sides and ends of the cot) is at least 560 mm when the cot base is in its lowest adjustment position.
(ii) a minimum distance of 300 mm is maintained between the top surface of the mattress and the lower surface of the top rail of the sides and ends of the cot when the cot base in its highest position.

20 Distance measured with the cot base in its lowest adjustment position.

21 It shall be the maximum permissible height between the top rails of any adjacent sides of a cot that have slats or spindles. The height difference shall be measured within 150 mm of the intersection of the two sides.

22 See Figure 27 of Annex 3 of this standard.

23 **WARNING:** In addition to the minimum requirements specified in this standard, the mattress supplied with the cot must satisfy all the safety requirements established in the Regulations, Standards or Technical Specifications for mattresses.

24 Mattress thickness shall be in accordance with section III.1.A.13.

25 Products with an adjustable cot base shall be tested with the cot base in the lowest adjustment position.

26 See Figure 28 of Annex 3 of this standard. Test methods for sharp edges, sharp points, and closed tube endings.

27 Every coil spring of a cot must be covered or manufactured so as to prevent injury to the child.

28 Modification of the test method described in section 5.14 of ASTM F406-19: it must be taken into account that the space between spirals of the coil springs is less than 5 mm, using a suitable probe.

29 See Figure 29 of Annex 3 of this standard. Self-tapping screws include wood screws, particleboard screws and the like.

30 Factory assembly using wood screws on key structural elements is allowed if the wood screws are a second method of attachment or the wood screws include a lock washer, glue or other means to impede loosening or detachment.

31 If the component can be assembled in more than one way, it must have permanent markings on it that indicate how to assemble it and that remain conspicuous when the cot is not correctly assembled. In addition, all components of the cot shall:

a) be permanently fixed or require the use of a tool to enable partial or total disassembly of the cot.
b) utilize a system of assembly/disassembly that precludes possible tampering by a child within the cot.

32 Modification of the test method described in section 5.5.3 of EN 716-2:2017: only the application of a tensile force (pull force) of 90N will be taken into account, without taking into account the largest accessible dimension of the part.

33 The locks shall prevent the castors from rolling and they shall not unlock when tested.

34 Modification of the test method described in section 5.4.1 of EN 716-2:2017: It will only be taken into account the shear and squeeze points produced during normal use which are less than 5 mm.

35 See Figure 30 of Annex 3 of this standard.

36 For the purposes of this requirement, parts of cot sides and ends more than 1400 mm above the cot base, measured from its lowest adjustment position, are considered not accessible.

37 For the purposes of this requirement, projections or protuberances that are located above the cot base or that protrudes above it, when the cot base is in any of its adjustment positions, must be taken into account. However, corner posts that extend more than 406 mm above the highest point on the upper surface of the higher of the sides and ends of the cot, is deemed to not be a projection.

38 If the weight of the child on the cot base has a positive effect on the locking, this is accepted as an operating device.

39 With the exception of the locks on castors/wheels.

40 The locking system shall function before and after testing in accordance.

41 Gaps formed between adjacent slats are not considered “gaps” for the purpose of this provision.

42 With the exception of the locks on castors/wheels.

43 Observations relating to the tests:

1. The slats of a cot must not turn, dislodge, become deformed or otherwise damaged when tested.
2. After testing, elements attached by screws or threaded fasteners shall not have separated by more than 1 mm.
3. Fittings and fastening devices shall not be damaged or detached and shall continue to function normally.
4. After testing, the function of the cot shall not be impaired.

44 Cot side cyclic test.

45 Test for strength and integrity of slats/spindles (torque test and tensile test).

46 Test for strength of slats/spindles (impact test).

47 Test for strength of solid sides/ends (impact test).

48 Test for strength of filler panels of the sides/ends of the cot (bending test).

49 Test for strength of corners (impact test).

50 Test for strength of slats/spindles (bending test).

51 Observations relating to the tests:

1. When tested, no cot shall exhibit structural failure or loosening of fasteners.
2. There shall be no separations/clearances in the joints of the cot.
3. After testing, elements attached by screws or threaded fasteners shall not have separated by more than 1 mm.
4. After testing, the function of the cot shall not be impaired.

52 See Figure 31 of Annex 3 of this standard. The limitations described in this provision do not apply to a corner post assembly that extends more than 406 mm above the highest point on the upper surface of the higher of the sides or ends that adjoin the post.

53 Modification of the test method described in section 5.4.1 of ASTM F1169-19: no corner post assembly shall extend more than 5 mm above the upper edge of an end or side panel, whichever is lower, when measured from the lowest point on the upper edge of the end or side panel within 76 mm from the outermost contour of the post.

54 Cords and straps shall be made of a flexible material such as fabric, elastic or plastic material.

55 Cords and straps shall not extend to the occupant retention area when they are in a stretched state.

56 See Figure 32 of Annex 3 of this standard.

57 **WARNING:** If toys or similar accessories are supplied with the cot (e.g. attached to the sides/ends of the cot), it must be necessary to contact Inditex Sustainability Department.

58 To prevent possible tampering by a child.

59 Physical quantity: physical property that can be expressed as the combination of a magnitude expressed by a number. E.g. length, width, height, depth, diameter, radius, surface (length by width), etc.

60 See Figure 33 Annex 3.

61 See of Figure 38. Annex 3 of this standard.

62 Do not apply to a corner post assembly that extends at least 406 mm above the uppermost surface of the side rail in its highest position. Corner posts intended to accept removable vertical extensions made up of two or more segments (such as canopy post extensions) shall not permit the attachment of individual segments such that the resultant vertical extension would be in violation of the dimensional requirements of the first sentence.

63 See Figure 35 of Annex 3 of this standard.

64 At rest position.

65 There shall be no accessible hazardous compression point within the protected volume which can close to less than 18 mm unless the clearance is always less than 5 mm.

66 The height of sides and ends shall be tested during the performance of GB 30004:2013, 6.11 too.

67 See Figure 18 of Annex 3.

68 See Figure 19 of Annex 3.

69 When a minicot is tested in accordance with SOR 2016-152 Schedule 2, there must not be any completely bounded opening through which a solid rectangular block with the dimensions 60 mm × 100 mm × 100 mm is capable of passing in any orientation.

70 Block A specified in ASTM F406-19, 8.1.2.

71 These requirements do not apply when the lowest part of the opening is less than 600 mm from the floor.

72 See Figure 34 of Annex 3 of this standard.

73 The filling material of the uncompressed sleeping pad such as foam, fiberfill, etc. shall not exceed 25-mm in thickness. The total thickness of the uncompressed pad including all fabric or vinyl layers, filling material, and any structural members such as wood, hardboard, etc., shall not exceed 38 mm.

74 See Figure 27 of Annex 3 of this standard.

75 When the mattress is inserted in the center of the unit in a non-compressed state.

76 When the mattress is placed against the perimeter of the unit.

77 Segmented mattresses that have seams (located between segments or where the mattress folds) that are less than 380mm in length are excluded from this requirement.

78 See Figure 28 of Annex 3 of this standard.

79 See Figure 29 of Annex 3 of this standard.

80 There shall be no small parts as defined in 16 CFR 1501 before evaluation or liberated as a result of testing.

81 A component is considered able to be gripped if the child can grip the component between its thumb and forefinger or between its teeth. To assess whether a child can grip a component, the test EN 1130:2019, 8.7.2.1 shall be performed.

82 Torque test.

83 Tensile test.

84 Mattress support test.

85 Dynamic test.

86 Bending test. Strength of structural components of side plate and end plate.

87 Strength and integrity of slats.

88 Strength of sides or sides slats: Impact test. This test only applies to minicots whose sides have an internal height greater than 400 mm and to minicots with a drop side.

89 Strength of corners: Impact test. This test only applies to minicots whose sides have an internal height greater than 400 mm and to minicots with a drop side.

90 Test for strength of mesh and integrity attachment.

91 Cs=8h+47,5x-103,5z+17b. Stability parameters, see Figure 39 on ANNEX III.

92 The requirements shall be fulfilled before and after evaluation.

93 Locking mechanism shall be able to prevent unexpected fold over when the infant is inside, including the process of infant is put in and taken out.

94 Systems of the types (a), (b) and (c) shall operate as intended after operating (opening and closing) the locking mechanism 300 times. Systems of type (d) shall require a force of at least 50 N to operate when tested in accordance with 8.5.2.2."

95 Minicots that in every position of use have to be removed from the stand to adjust the height are excluded from the requirements of this clause.

96 See in EN 1130:2019, 5.2.

97 Systems of the types (a), (b) and (d) shall operate as intended after operating (opening and closing) the locking mechanism 300 times. Systems of type (c) shall require a force of at least 50 N to operate when tested in accordance with EN 1130:2019, 8.5.3.

98 **WARNING:** If toys or similar accessories are supplied with the cot (e.g. attached to the sides/ends of the cot), it must be necessary to contact Inditex Sustainability Department.

99 Physical quantity: physical property that can be expressed as the combination of a magnitude expressed by a number. E.g. length, width, height, depth, diameter, radius, surface (length by width), etc.

100 To assess the rigidity of sides of the carry cot, EN 1466:2014, 7.1.2.1.2 must be performed. If the difference between the two measurements is less tan 40 mm, the sides of the carry cot are considered as rigid. Otherways are considered as non-rigid.

101 Every carrycot must be manufactured so that the angle of the mattress support does not exceed 7° from the horizontal.

102 This test method is only applied for rocking or swing carrycot.

103 Block A specified in ASTM F406-19, 8.1.2.

104 The protected volume is determined by:

- the inner upper surface that supports the child, and
- the inner surface of the sides and ends of the carry cots.

105 There shall be no accessible hazardous compression point within the protected volume which can close to less than 12 mm unless the clearance is always less than 5 mm.

106 See Figure 34 of Annex 3 of this standard.

107 Do not apply to a corner post assembly that extends at least 406 mm above the uppermost surface of the side rail in its highest position. Corner posts intended to accept removable vertical extensions made up of two or more segments (such as canopy post extensions) shall not permit the attachment of individual segments such that the resultant vertical extension would be in violation of the dimensional requirements of the first sentence.

108 See Figure 35 Annex 3 of this standard.

109 See Figure 38 Annex 3 of this standard.

110 The filling material of the uncompressed sleeping pad such as foam, fiberfill, etc. shall not exceed 25-mm in thickness. The total thickness of the uncompressed pad including all fabric or vinyl layers, filling material, and any structural members such as wood, hardboard, etc., shall not exceed 38 mm.

111 See Figure 19 of Annex 3 of this standard.

112 When the mattress is inserted in the center of the unit in a non-compressed state.

113 When the mattress is placed against the perimeter of the unit.

114 Segmented mattresses that have seams (located between segments or where the mattress folds) that are less than 380mm in length are excluded from this requirement.

115 Self-adhesive plastic labels shall not be used within the protected volume of a carry cot.

116 A handle is regarded as flexible if it can be bent 90° perpendicular to the side of the carry cot when applying a force of 2 N.

117 Both test methods, EN 1466:2014, 7.9.2.2.1 and EN 1466:2014, 7.9.2.2.2 must be carried out together consecutively.

118 CAMI Infant Dummy New born baby described in ASTM F2194 16ε[1].

119 See Figure 41 of Annex 3 of this standard.

120 **WARNING:** If toys or similar accessories are supplied with the carrycot (e.g. attached to the sides/ends of the carry cot) it must be necessary to contact Inditex Sustainability Department.

121 Physical quantity: physical property that can be expressed as the combination of a magnitude expressed by a number. E.g. length, width, height, depth, diameter, radius, surface (length by width), etc.

122 Small torso probe, EN 14988:2017, 5.12.

123 With the exception of the entrance to the seat unit, the two openings for the child's legs and openings in the frame above the level of the top surface of the lateral protection.

124 If the crotch restraint is a strap, one end shall be linked to the front waist strap and the other end shall be secured to the seat. In case of the body harness, one end of the crotch strap shall be linked to the front waist strap and the other end secured to the rear waist strap or to the seat.

125 Lateral protection height.

126 Lateral protection length.

127 In case of reclinable backrest that can be reclined less than 60° to the horizontal.

128 When the backrest is in the most vertical position.

129 TEST MASS described in EN 14988:2017, 5.2.

130 High chairs in which the seat height cannot be adjusted either due to the construction of the high chair or when the child is inside the high chair are excluded from this requirement.

131 The requirements of this subclause do not apply to locking mechanisms.

132 Unless the distance is always less than 5 mm.

133 Hazardous compression points between the tray and the structure shall be assessed by applying a vertical downward force of 50 N in the most onerous position on the tray.

134 The restraint system is excluded from this clause.

135 See Figure 34 of Annex 3 of this standard.

136 Small parts are defined by 16 CFR 1501.

137 Any component that is considered capable of being gripped by a child shall be tested. In case of doubt, to assess whether a component can be gripped by a child, test EN 14988, 8.6.2.1 should be performed.

138 Torque test.

139 Tensile test.

140 With the exception of the back of the backrest, parts from the floor up to and including the under-surface of the seat, and buckles and adjusters of the restraint system.

141 No requirement for the force to be applied to the probe, as per EN 14988:2017.

142 Protrusion evaluation zone. Areas on the exterior planes of the high chair base at the rear corners which are within 2 in (51mm). from the corners formed by the intersection of the rear and side planes of the base and are located between 12 and 17 in (30,5 cm - 43,2 cm). above the floor. See Figure 43 of Annex3 of this standard.

143 For example, rivets, latch tabs, tray storage hooks.

144 Technical requirements for determining a sharp point in toys and other articles intended for use by children under 8 years of age.

145 Technical requirements for determining a sharp metal or glass edge in toys and other articles intended for use by children under 8 years of age.

146 Coil spring which is accessible to the occupant. The space between coils must be measured during Seat vertical static load test, Footrest vertical static load test and Tray Static Load Test. of section III.4.B.10 of III.4.

147 Or otherwise designed to prevent injury from entrapment.

148 General strength test.

149 Impact test. The tests shall be carried out for a total of 10 times at each point.

150 Seat vertical static load test.

151 Footrest vertical static load test.

152 Dynamic strength test.

153 Dynamic seat test.

154 Tray strength test.

155 Front Torso Support Disengagement. Horizontal Pull Test.

156 Tray or Front Torso Support Disengagement. Vertical Pull Test.

157 Tray Static Load Test.

158 Tray stability test.

159 Tray drop test.

160 Front torso support drop test.

161 This requirement must be met by a retention system consisting of a suspender-type belt. Leg retention, sub-abdominal straps and should straps, Typical restraint systems are a 5-point harness, or a full body harness. See Figure 44 of Annex 3 of this standard.

162 When a high chair is fitted with attachment points for an additional harness complying with EN 13210 as described in the instructions for use, these shall function as intended after testing. The attachment points shall be independently fixed and shall at all times remain within 50 mm in front of and not more than 75 mm above the junction line, i.e. in the shaded area shown in Figure 45.

163 CAMI Infant Dummy Mark II described in ASTM F404 -18.

164 The dummy shall be considered removed in the following situations:

- If the posterior of the test dummy is pulled past the front edge of the seat (ASTM F404-18, 7.8.5.1).
- If the dummy with the force applied reaches a vertical position with the bottom of its feet touching or off the seat. (ASTM F404-18, 7.8.5.3).

165 Tether length test method.

166 $C_S=(62h_s-91b_s-150x_s)$; $h_S$, $b_S$ and $x_S$ in mm. See Figure 46 of ANNEX III. Only valid for square and rectangular bases.

167 $C_F=(91S_d+132x_f-55h_f)$;$S_d$, $x_f$ and $h_f$ in mm. See Figure 47 of ANNEX III.

168 $C_F=(182S_d+132x_f-55h_f)$; $S_d$, $x_f$ and $h_f$ in mm. See Figure 47 of ANNEX III.

169 Except when the high chair can be converted into a baby walking frame. In this case, the castors shall be fitted in such a way that the chair cannot move when the child is sitting in it when In the high chair mode.

170 High chairs that have completely bounded leg openings in front of the occupant, on each side of a passive crotch restraint, when the tray is removed are exempt from the following tray latch release mechanism requirements.

171 Tray latch release mechanisms which only allow for a change in adjustment position of the tray and do not allow the tray to be detached from any attachment point to the high chair and trays on high chairs with a front torso support are exempt from the requirements in this section.

172 ASTM F404-18, FIG.4. See Figure 48 of Annex 3 of this standard.

173 Angle between Plane “A” on the foot and Plane “B” at the lower end of the leg. Figure 49 of Annex 3.

174 A change in the adjustment position of the tray is allowed provided that the tray cannot be detached from either side of the high chair.

175 For purposes of this requirement, each tray latch release mechanism is to be considered independently.

176 The interconnection must require either two consecutive actions, the first of which must be maintained while the second is carried out or two separate and independent actions that must be carried out simultaneously to fully release the tray. An attempt to actuate any one of the tray latch release mechanisms independently shall not allow either side of the tray to fully release from the high chair.

177 Visibility is to be determined when the seat is in the upright position and tray is in any manufacturer’s use position. A tray latch release mechanism is considered not visible to the occupant if the latch is flush to or recessed back from the plane perpendicular to the outer edge of the tray in the area of the tray latch release mechanism. area of the tray latch release mechanism.

178 Such as sheet metal screws and machine screws.

179 Lock washers, self locking nuts, or other means.

180 This clause applies only to textiles, coated textiles and plastic coverings. Hook and loop fasteners, cords and alike are excluded. Separate samples may be used for these tests.

181 By hot stamping, heat transfer, printing, wood burning, etc.

182 **WARNING:** If toys or similar accessories are supplied with high chair, it must be necessary to contact Inditex Sustainability Department.

183 Physical quantity: physical property that can be expressed as the combination of a magnitude expressed by a number. E.g. length, width, height, depth, diameter, radius, surface (length by width), etc.

184 In the event of evaluation these requirements shall be fulfilled before and after evaluation.

185 The 229 mm diameter probe (Large head probe) described in ASTM F2388– 18, Fig 7 shall be used instead of the head probe 2 described in EN 12221-2:2008+A1:2013, 4.16.2.

186 Within the accessibility zone.

187 Openings surrounded by a boundary on all sides. Exempt from this requirement are self-folding steps when in their open position.

188 Torso probe shown in Fig. 6 of ASTM F2388– 18.

189 229 mm diameter probe (Large head probe) described in ASTM F2388– 18, Fig 7.

190 Small head probe described in Fig. 8 of ASTM F2388– 18.

191 Only applicable to shelves above 109 mm from the floor. Pullout drawers and shelves enclosed within a cabinet equipped with a door(s) are also excluded from this requirement.

192 Head probe 1 described in EN 12221, 4.16.1.

193 Changing board flaps are excluded from this requirement.

194 Each safety barrier shall be tested three times.

195 Impact test.

196 Drop test.

197 Changing board flaps and wall mounted changing units are excluded from this requirement.

198 Threaded fasteners used for key structural elements shall not have separated by more than 1 mm after application of this standard.

199 Restraint system is not mandatory, but if supplied, it must comply with the requirements.

200 **WARNING:** If toys or similar accessories are supplied with changing product, it must be necessary to contact Inditex Sustainability Department.

201 Physical quantity: physical property that can be expressed as the combination of a magnitude expressed by a number. E.g. length, width, height, depth, diameter, radius, surface (length by width), etc.

202 This measurement shall be carried out before the whole test procedure.

203 This requirement applies to holes or slots that have a wall thickness less than 0.375 in (9.53 mm). For example, vents, zipper tabs, and any other rigid components that may be designed into a mattress.

204 This requirement applies to all mattress toppers, to mattresses that are more than 30 mm in thickness as well as to mattress bases with a soft filling thickness of more than 30 mm.

205 The tests may be carried out on a separate sample.

206 http://www.inditex.com/en/home

207 Chemical substances and parameters specifically regulated in Child Care Furniture for domestic use.

208 In case of contents between 40 and 90 ppm, it must be necessary to contact Inditex Sustainability Department.

209 These limits also apply to coatings of the cot in Japan.

210 This limit is established according to Washington regulation for childcare articles. However, in CTW the established limit for cadmium (in plastics, paints, surface coatings, printed parts and metallic parts) is 75 mg/kg and the Washington limit is an exception only to be employed in Washington.

211 MDL = 0.5 ppm.

212 MDL = 1 mg/Kg.

213 The limit of Sb for mattress for cot and minicot and carrycot is 560 mg/kg.

214 The limit of Ba for mattress for cot and minicot is 18750 mg/kg.

215 The limit of Cadmium for changing products is 75mg/kg.

216 Only for parts made mainly of PVC.

217 The limit of Cr (III) for mattress for cot and minicotand carrycot is 460 mg/kg.

218 For metal parts and metallic coatings of rubber or plastic parts of children articles in Taiwan, the test result of Cr(VI) according to method CNS 15331 shall be negative.

219 The limit of Ca (VI) for mattress for cot and minicot and carrycot is 0.2 mg/kg.

220 The limit of Pb for mattress for cot and minicot and carrycot is 160 mg/kg.

221 The limit of Hg for mattress for cot and minicot and carrycot is 94 mg/kg.

222 The limit of Selenium for changing products is 500mg/kg.

223 Arsenic and Chromium are analyzed in heavy metal section.

224 Synthetic chemicals, if used, shall be those listed in Appended Table 1 of the Japanese Ordinance (except when no migration of the colorant is caused after the color migration test): Food Blue No.1 (and its Aluminum Lake); Food Blue No.2 (and its Aluminum Lake); Food Green No.3 (and its Aluminum Lake); Food Red No.2 (and its Aluminum Lake); Food Red No.3 (and its Aluminum Lake); Food Red No.40 (and its Aluminum Lake); Food Red No.102; Food Red No.104; Food Red No.105; Food Red No.106; Food Yellow No.4 (and its Aluminum Lake); Food Yellow No.5 (and its Aluminum Lake).

225 REACH SVHC list: http://echa.europa.eu/es/candidate-list-table.

226 The SVHC candidate list is available on the ECHA website (http://echa.europa.eu/es/home).

227 **Active substance:** any substance or a micro-organism that has an action on or against harmful organisms. (https://echa.europa.eu/es/information-on-chemicals/biocidal-active-substances).

228 **Biocidal product:** any substance or mixture, in the form in which it is supplied to the user, consisting of, containing or generating one or more active substances with the intention of destroying, deterring, rendering harmless, preventing the action of, or otherwise exerting a controlling effect on any harmful organism by any means other than mere physical or mechanical action. Treated articles that have a primary biocidal function are considered biocidal products.

229 **Treated article:** any substance, mixture or article which has been treated with, or intentionally incorporates, one or more biocidal products. Treated articles are divided in three categories depending on their reference to active substances and their biocidal properties:

- Treated articles with no claim or reference to biocidal properties.
- Treated articles with a claim referring to biocidal properties.
- Treated articles with no reference to biocidal properties but with approved active substances and related labelling requirements.

230 http://oehha.ca.gov/prop65/prop65_list/Newlist.html.

231 For further information, contact Inditex Sustainability department.

232 LOD = 20 ppm (from CTW).

233 ND = 0.5 mg/kg.

234 ISO/TS 16179: 2012. Footwear -- Critical substances potentially present in footwear and footwear components -- Determination of organotin compounds in footwear materials.

235 MDL = 5 ppm.

236 http://regs.cqstatetrack.com/info/get_text?action_id=551710&text_id=140892&type=full_text

237 https://oehha.ca.gov/proposition-65/about-proposition-65

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