

Australian/New Zealand Standard™

Folding cots—Safety requirements



AS/NZS 2195:2010

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Department of Health, SA
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Australian/New Zealand Standard™

Folding cots—Safety requirements

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PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee CS-003, Safety Requirements for Children's Furniture to supersede AS/NZS 2195:1999, *Folding cots—Safety requirements*.

This Standard incorporates Amendment No. 1 (July 2013) and Amendment No. 2 (April 2015). The changes required by the Amendment are indicated in the text by a marginal bar and amendment number against the clause, note, table, figure or part thereof affected.

This Standard was revised due to a number of incidents involving folding cots and the vastly changed nature of the product since the previous edition of the Standard.

The objective of this Standard is to provide regulatory authorities with essential safety requirements and to provide manufacturers with functional, durability, stability and performance criteria to reduce the likelihood of death or injury to infants occupying folding cots.

The objective of this revision is to incorporate requirements for accessories such as bassinets, change tables, mosquito nets and specifically addresses the need for better marking and labelling requirements to prevent potential entrapment and suffocation hazards associated with these products if not used or assembled according to manufacturers' instructions.

Committee CS-003 considered suitable materials for cot sides to provide breathability. The requirements of this Standard are for cot sides with an open weave fabric with openings of at least 1.5 mm. In future, other materials may prove suitable and these will be considered for inclusion in this Standard.

This Standard is not intended to limit design, but dimensions are specified where the Committee considered that these relate to the child's safety.

The term 'normative' has been used in this Standard to define the application of the appendix to which it applies. A 'normative' appendix is an integral part of a Standard.

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FOREWORD

The most important safety hazards found with folding cots are:

- (a) Inadvertent release of locking devices and subsequent collapse of a cot's side.
- (b) Strangulation or asphyxiation hazard resulting from the entrapment of a child's neck if one or more of the locking devices fails and the sides form a clamping 'v' shape.
- (c) Suffocation hazard resulting from the use of non-breathable materials for the mattress and flexible sides of the folding cot, sometimes involving a child's head being entrapped between the mattress and flexible sides of the cot. Breathability requirements have been included for the sides of the folding cot but a requirement for mattresses is still to be developed.

Specific safety requirements are included in this Standard that are designed to overcome such safety issues. These include testing for strength and durability of the locking devices and folding mechanism. A bite test and a detachable parts test ensure children cannot swallow small parts of components of the cot. Requirements are also included to ensure there are no footholds and a sufficient depth of sides to prevent children from falling out of the cot.

STANDARDS AUSTRALIA/STANDARDS NEW ZEALAND

Australian/New Zealand Standard Folding cots—Safety requirements

1 SCOPE

This Standard specifies safety requirements for folding cots and accessories used with folding cots. These requirements cover materials, design, construction, performance, labelling and marking, all of which are important for the well being of children who use cots. The Standard is applicable to folding cots constructed of metal, plastic, textile fabric or mesh. For timber folding cots or cots made with rigid materials (see Clause 5) reference is made to AS/NZS 2172. Playpens with a floor also fall within the scope of this Standard as they are essentially the same product as folding cots. Playpens without a floor are not covered by this Standard.

This Standard is not applicable to cradles, carry cots or to non-folding cots.

2 APPLICATION

This Standard is applicable to cots that can be readily dismantled or folded for transportation or storage, intended for children in households or day nurseries.

3 REFERENCED DOCUMENTS

The following documents are referred to in this Standard:

AS

2001 Methods of test for textiles

2001.2.3.2 Method 2.3.2: Physical tests—Determination of maximum force using the grab method (ISO 13934-2:1999, MOD)

2001.2.10 Method 2.10: Physical tests—Determination of the tear resistance of woven textile fabrics by the wing-rip method

2001.2.21 Method 2.21: Physical tests—Determination of seam opening due to the application of force in the transverse direction

2281 Flexible cellular polyurethane for seat cushioning and bedding

AS/NZS

2172 Cots for household use—Safety requirements

AS/NZS ISO

8124 Safety of toys

8124.1 Part 1: Safety aspects related to mechanical and physical properties (ISO 8124.1:2000, MOD)

8124.3 Part 3: Migration of certain elements

4 DEFINITIONS

For the purpose of this Standard the definitions below apply.

4.1 Accessible to the child

Within the reach of the child that is inside the folding cot, including components of the folding cot that are on the outside to within a distance of 300 mm in any direction except below the mattress base.

NOTE: See Clause 4.12 for the definition of ‘within the folding cot’. When a child is ‘within the folding cot’, components that a child can reach need to be tested, and components that cannot be reached do not need to be tested, e.g. castors.

4.2 Accessory

Any item that is not an integral part of the folding cot but is supplied or specified by the manufacturer or distributor as being suitable for use with the cot, e.g. bassinet.

4.3 Base

A rigid surface on which the cot mattress is supported. The base may be an integral part of the mattress.

4.4 Bassinet

An elevated surface consisting of a mattress and base for sleeping for a baby who can not sit up.

4.5 Folding cot

Enclosure intended for sleeping and which can be folded when not in use. It also refers to enclosures referred to as playpens with a floor, but not those without a floor.

4.6 Key thread

The key thread is a thread at the end of a seam that if pulled will pull the stitching apart and disassemble the sewn assembly.

4.7 Locking mechanism

A system designed to maintain the folding cot in its erected position of use and which will inhibit the cot from unintentional folding or collapsing. A locking mechanism may consist of one or more locking devices.

4.8 Mattress

A padded surface on which the child is supported. The mattress may be an integral part of the base.

4.9 Playpen

An enclosure that is designed to retain a child while playing. Playpens that include a floor are also referred to as 'folding cots', see Clause 4.5.

4.10 Shear and pinching points

Gaps which occur when two parts close together during relative movements that can trap parts of the body.

4.11 Textile material

Fabric or mesh used to form the sides, ends and base of some folding cots.

4.12 Within the folding cot

The internal space bound by the sides and the ends of the folding cot forming the walls, and the mattress base.

NOTE: See Clause 4.1 for the definition of 'accessible to the child'.

5 TIMBER FOLDING COTS

Timber folding cots shall comply with the requirements in Clauses 8.1, 10.5 and 10.9 of this Standard and all applicable requirements of AS/NZS 2172. Clauses 8.1, 10.5 and 10.9 of this Standard shall take precedence over any similar requirements in AS/NZS 2172.

NOTE: An example of a non-applicable requirement of AS/NZS 2172 would be a dimension or test involving a dropside or dropside guide if the timber folding cot does not have a dropside.

6 MATERIALS

6.1 Metals

All metal components, including springs, nuts, bolts and washers, shall be made either of corrosion-resistant material or be protected against corrosion.

6.2 Plastic materials, paints, lacquers and varnishes

All painted coatings and plastic components accessible to the child within a folding cot shall comply with the maximum acceptable levels of elements migration when tested in accordance with AS/NZS ISO 8124.3.

6.3 Textile and padding material

6.3.1 Toxicity

Textile materials used in the construction of folding cots accessible to the child within a folding cot shall comply with maximum acceptable levels of elements migration when tested in accordance with AS/NZS ISO 8124.3.

6.3.2 Mesh openings

Where mesh is used in folding cots, the mesh opening size shall comply with the relevant requirements of Clause 10.12.

6.3.3 Breathability of textiles material and other materials

Textile materials and other materials used in the breathable zone around the mattress shall be such that a child can breathe through the material.

NOTE: This Standard specifies the constructional requirements for the sides of the cot but not the mattress. Manufacturers are encouraged to use suitable materials for the mattress and covering keeping in mind the possibility of suffocation.

6.4 Strength and construction

6.4.1 General

Textiles and mesh shall have sufficient strength and shall be sewn in such a manner that the occupant is contained within the folding cot.

6.4.2 Breaking strength of textiles

Textiles should have a breaking strength of at least 220 N when tested in accordance with AS 2001.2.3.2.

6.4.3 Tear resistance of textiles

Textiles should have a tear resistance of at least 9 N when tested in accordance with AS 2001.2.10.

6.4.4 Seam strength

All seams used on the sides, ends and undersides should have breaking strength of at least 130 N when tested in accordance with AS 2001.2.21.

7 CONSTRUCTION AND ASSEMBLY

The following shall apply:

- (a) All components of a folding cot's construction shall be designed such that a child cannot unfasten or dismantle them. For example, the components of a folding cot could—
 - (i) be permanently fixed;
 - (ii) require the use of a tool to enable partial or total disassembly; or
 - (iii) require a series of integrated procedures each of which is dependent on others for assembly/disassembly.

- (b) There shall be no small detachable parts on a folding cot other than those complying with Clauses 7(a) and 10.10.

NOTE: The intention of Clause 7(b) is to avoid the possibility of a child swallowing or inhaling small detachable parts from the folding cot that pose a choking hazard.

- (c) There shall be no open ended tubes accessible to the child within the folding cot,
- (d) The folding cot when erected shall not have any features accessible to the child such as projections, holes, loose washers, fastenings, nuts or crevices on which the child's body or clothing could become snagged, or entangled or entrapped (see Clause 8.7).

NOTE: The intention of Items (c) and (d) is to avoid the possibility of a finger becoming entrapped or a child's clothing becoming snagged (and the child possibly strangled) by any component of the folding cot.

- (e) The folding cot shall be designed and be able to be assembled or erected by following the manufacturer's instructions in such a way as to prevent any injury from scissoring, shearing or pinching points.

NOTES:

- 1 This requirement applies while the folding cot is being erected for use, being folded up, and when fully assembled.
- 2 Any labelling that provides precautions as to preventing an injury should be visible prior to the action of erecting or assembly of the folding cot.

- (f) With the exception of inflatable tyres, no components of the folding cot shall be inflatable.

8 DESIGN

8.1 Dimensions

The following dimensions, which relate to the safety of babies and children, shall apply:

- (a) *Depth of folding cot lower position (mattress and base fitted)*

The vertical distance between the top of the mattress and the top edge of the lowest side or end shall not be less than 500 mm.

- (b) *Depth of folding cot bassinet position (with mattress and base fitted)*

For folding cots with a bassinet or upper base fitted, the vertical distance between the top of the mattress and the top edge of the lowest side or end shall not be less than 250 mm.

NOTE: In folding cots, the bassinet position (i.e. upper base position) may be an accessory, in which case the folding cot cannot comply with this Standard unless the accessory has been attached to the folding cot and subjected to all tests in this Standard as if it were a part of the folding cot unit.

- (c) *Distance between the mattress and the textile material at the sides or ends of the folding cot*

The mattress and base shall touch the sides and ends of the folding cot and if applicable the sides and ends of any bassinets, i.e. fit snugly when tested as per Clause 10.21(b).

NOTES:

- 1 The space between the mattress and flexible sides and ends are covered by the requirements in Clause 10.2 to ensure that a child's head can not become entrapped in such a space and the requirements of Clause 10.21(b) that test for a snug fit.
- 2 When the product has been erected for use, all gaps should remain less than 5 mm, or 12 mm or more at all times. Flexible components of the folding cot such as textile material and mesh are covered by the requirements in Clause 10.2.

8.2 Breathability

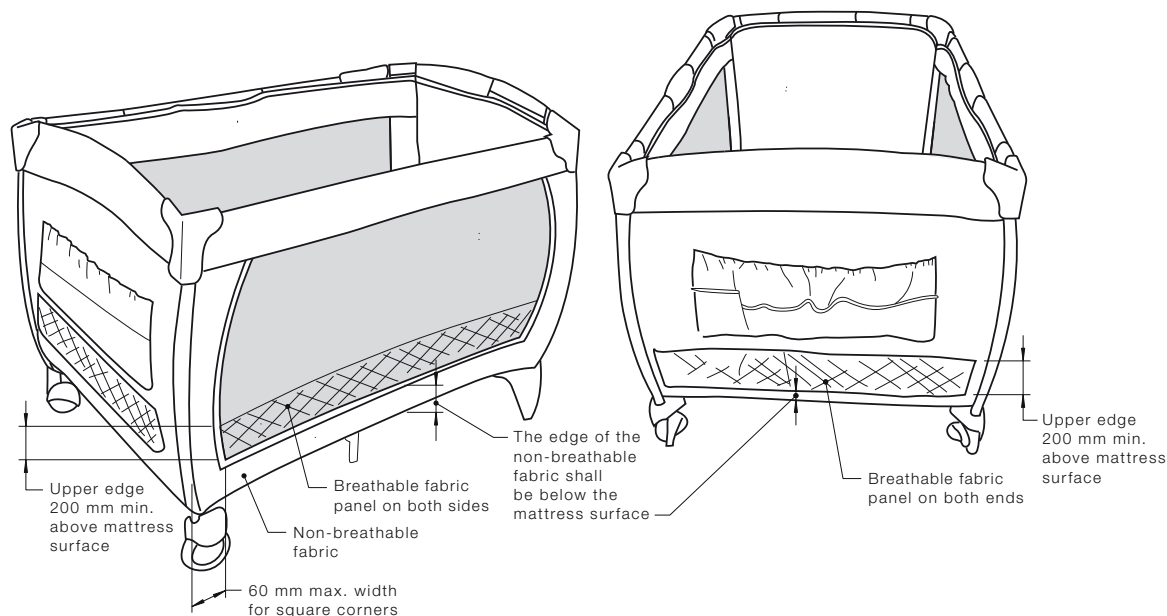
Folding cots shall have breathable zones adjacent to the sleeping occupant as shown in Figure 1 and as follows:

- (a) Breathable zones shall be provided on all sides of the lower position of the folding cot and all sides of the bassinet. Where any side of the bassinet contacts with the side of the folding cot, the side of the folding cot shall also be provided with breathable zones that are aligned with the breathable zones of the bassinet.
- (b) Breathable zones shall be made of suitable materials which comply with the relevant requirement of Clause 10.12 that consist predominantly of openings that have a minimum diameter of 1.5 mm or an area of 1.8 mm².

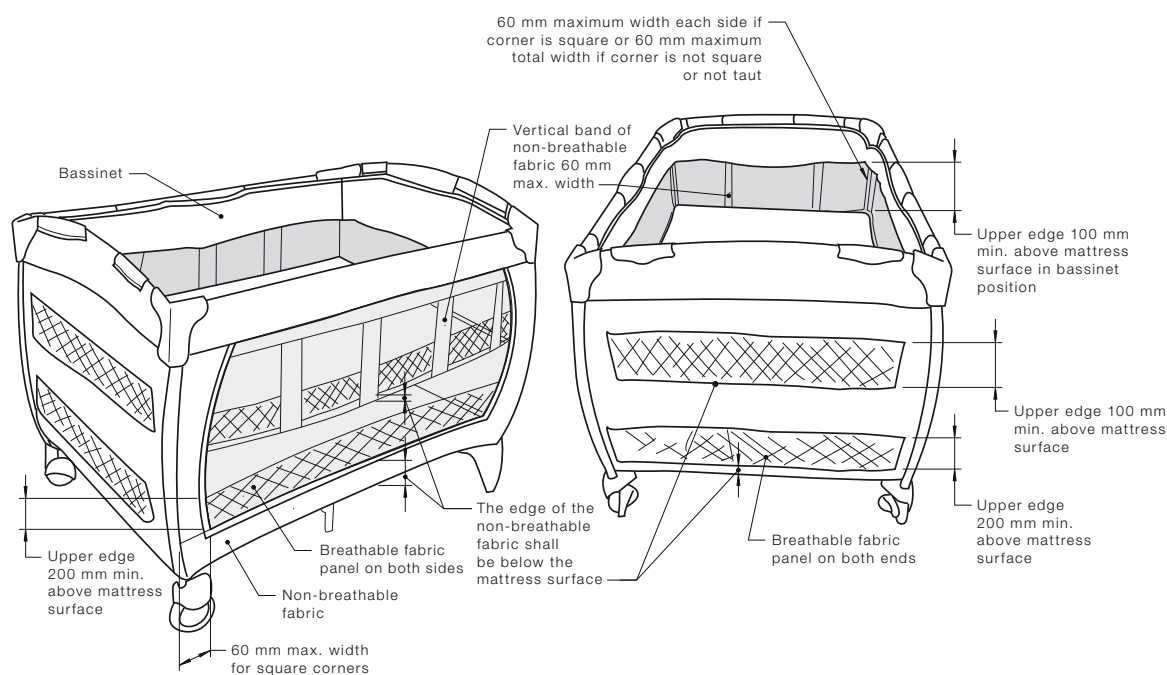
NOTE: Non-circular openings are acceptable provided the minimum area of each opening is equivalent to that of a 1.5 mm diameter circle (i.e. 1.8 mm²). See also Clause 10.12.

- (c) Breathable zones may be fitted with an external flap of non-breathable material that may be rolled up or deployed to cover a breathable zone to prevent drafts. The flap shall be designed such that it cannot be fitted or drawn closely to the surface of the breathable zone.
- (d) The minimum dimensions measured at the inside of the folding cot and the location of the each breathable zone shall comply with the following:
 - (i) For the lower position of the folding cot, the lowermost point of the upper edge of the breathable zone shall be at least 200 mm above the level of the top surface of the mattress, and the bottom edge of the breathable zone shall be below the level of the top surface of the mattress (see Figure 1).
 - (ii) For the bassinet position of the folding cot and any bassinet, the lowermost point of the upper edge of the breathable zone shall be at least 100 mm above the level of the top surface of the mattress, and the bottom edge of the breathable zone shall be below the level of the top surface of the mattress (see Figure 1).
 - (iii) Non-breathable material in the breathable zone is permitted for structural purposes only and shall comply with the following:
 - (A) Be vertical bands and have a width of not more than 60 mm with a separation of not less than 150 mm.
 - (B) Have a width measured on the inside of the folding cot of not more than 60 mm on each side if it is at a corner and is square (approximating 90°).
 - (C) Have a total width measured on the inside of the folding cot of not more than 60 mm if it is at a corner and is not square or if the material at the corner is not taut.

NOTE: It is considered that a sleeping occupant can assume a position anywhere on the mattress surface, thus all four sides require breathable zones.



(a) Folding cot without bassinet



(b) Folding cot with bassinet

FIGURE 1 BREATHABLE ZONE LOCATIONS ON FOLDING COTS

8.3 Footholds

There shall be no features of the folding cot sides or ends up to 400 mm above the level of the top surface of the mattress which present a potential foothold.

Potential foothold refers to the following:

- (a) Fabric or mesh (or materials with openings for breathability) or structures of the folding cot that are on the outside, adjacent to a fabric or mesh panel of a folding cot's sides or ends. See Clause 10.13.

- (b) A ledge or relief more than 15 mm wide and 5 mm deep.
- (c) Any surface inclined at an angle of less than 55° to the horizontal.

NOTES:

- 1 The intention of this requirement is to reduce the possibility of child climbing and falling out of the folding cot. See also Clause 10.13.
- 2 The measurement of the depth of a potential foothold includes reliefs as well as ledges or components of reliefs and ledges.
- 3 The measurement of the angle of a potential foothold should be made from the deepest point.

8.4 Mattress and base

The following shall apply:

- (a) The base shall be constructed of a rigid material and may consist of segments.
- (b) The base shall be so designed as to provide a firm flat support for a mattress.
- (c) The base shall not fold when the occupant stands in the folding cot. See Clause 10.21.
- (d) All padding or cushioning material, including the mattress, shall be sufficiently firm to preclude its forming to the contours of the occupant's face, and shall comply with AS 2281 Type N.
- (e) A child lying in a folding cot or bassinet shall not cause the mattress and base to partially fold or create recesses where the padding or cushioning material, including the mattress forms around the face of the child.
- (f) If a mattress is not provided in the folding cot packaging, the inner bottom of the cot (i.e. base) shall be padded so it is a combined mattress and base.

8.5 Locking mechanisms

8.5.1 Locking device design

All locking devices shall have a clearly distinct locked position.

NOTES:

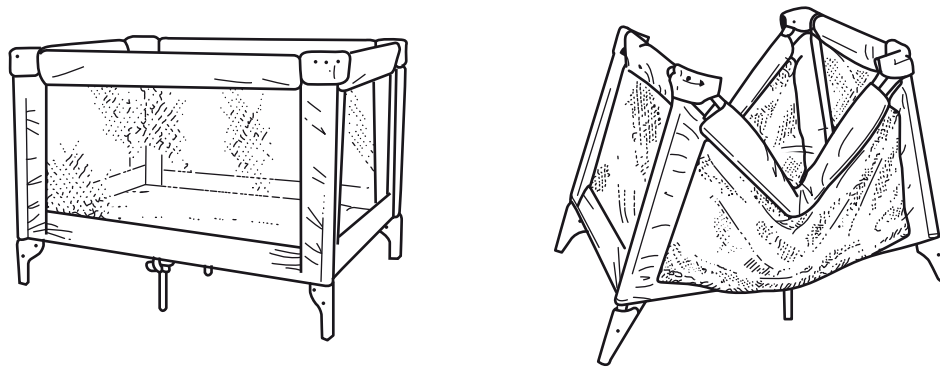
- 1 This is intended to make it simple to tell that the folding cot is fully erected therefore lessening the chance of the cot inadvertently partially collapsing. While it is essential that locking mechanisms be secure and that their locked or unlocked status be unmistakable obvious, it is also important that they be easy to operate. Locking mechanisms that are difficult to engage are less likely to be properly operated.
- 2 It is suggested that at least two locking devices are fitted in order to ensure that the folding cot does not totally collapse if one device fails. It is intended that children or infants should not be able to operate the folding mechanism.

8.5.2 Folding mechanism design

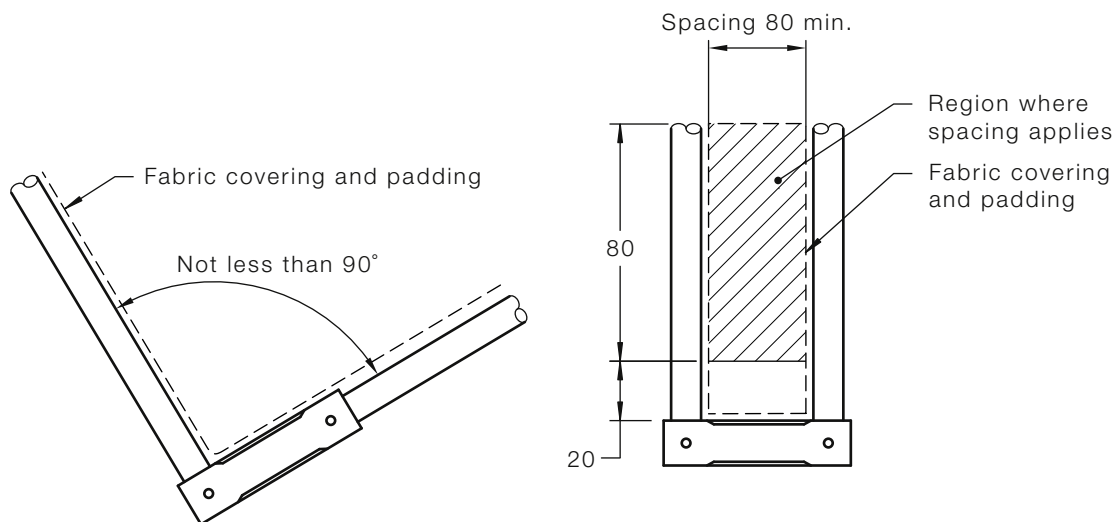
Any top rail folding mechanism shall be designed to eliminate or at least minimize 'V' shaped entrapment hazards when the frame folds. In the event of the failure of one locking device any resulting 'V' shape angle of entrapment shall be not less than 90° (see Figure 2(b)). In the event of failure of both locking devices the resulting entrapment dimension in the indicated region shall be not less than 80 mm including the fabric covering (see Figure 2(c)).

An example of folding mechanism design is shown in Figure 2(a).

NOTE: See Clause 10.14 for requirements.



(a) Example of a folding cot erected and with two sides unlocked creating a 'V' shape



(b) Failure of one locking device

(c) Failure of two locking devices

DIMENSIONS IN MILLIMETRES

FIGURE 2 EXAMPLES OF LOCKED AND UNLOCKED FOLDING MECHANISM

8.5.3 Activation of the folding mechanism

The locking mechanism operating the folding mechanism of a folding cot shall be designed so that a child within the cot cannot open or activate the mechanism causing a full or partial collapse of the cot. Folding cots shall be equipped with at least two locking devices. For example this requirement may be complied with in one or more of the following ways:

- Two locking devices, separated by at least a distance of 850 mm.
- A system that requires at least two separate but simultaneous actions operating on different principles.
- A system of locking mechanisms 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 sustained.

If the weight of the child on the base has a positive effect on locking, then this is accepted as one of the locking devices.

The force to release a locking mechanism in the top rail which starts to cause folding shall require force of at least 50 N before and after being tested in accordance with Appendix G. This force shall be measured with all other locking devices still engaged.

8.6 Castors or wheels

When the folding cot is fitted with castors or wheels, they shall be fitted with a brake on each castor or wheel to prevent unintentional movement.

8.7 Protrusions and gaps

Protrusions accessible to the child within the folding cot shall not be more than 5 mm unless they are so designed that they cannot snag onto clothing.

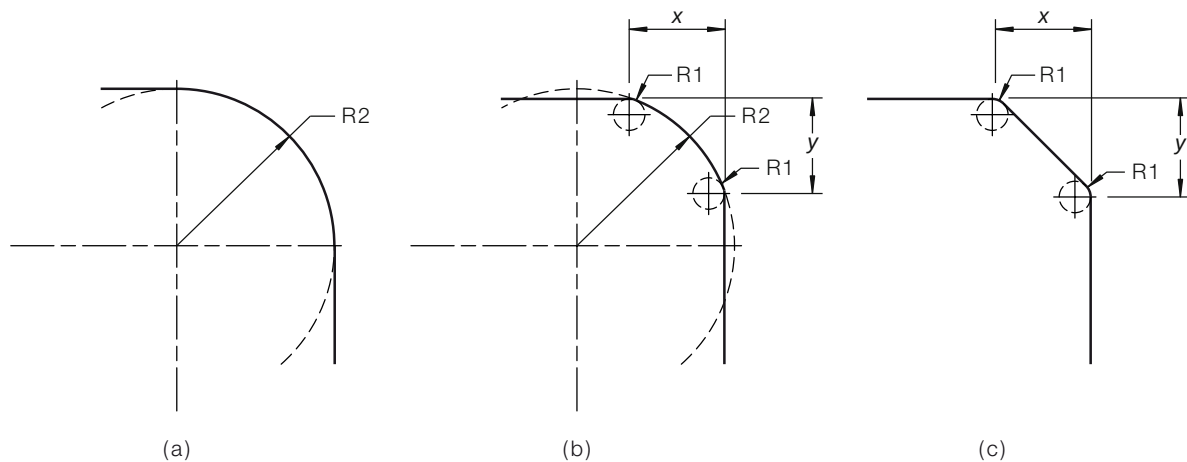
NOTE: The intention of Clause 8.7 is to ensure that protrusions and snag points on a folding cot do not present a means by which the child's clothing could snag and thereby present a strangulation hazard.

8.8 Sharp edges and sharp points

Unless covered by padding or not accessible to the child within the folding cot edges, protrusions or sharp points shall comply with the following:

- (a) There shall be no protrusions within the folding cot that are accessible to the 95 mm diameter spherical probe specified in Appendix A unless they have a radius of at least 1 mm and not exceeding 5 mm in height.
- (b) Edges within the folding cot and along the top of the folding cot that are accessible to the 95 mm diameter spherical probe specified in Appendix A shall have a radius of at least 1 mm or chamfered in accordance with Figure 3.
- (c) Small components above the mattress base, such as hinges, brackets and catches, shall be free from burrs, hazardous sharp points and hazardous sharp edges. Potential sharp points and sharp edges shall be tested in accordance with the relevant requirements of AS/NZS ISO 8124.1.

NOTE: The intention of this Clause is to be ensure that the inside of a folding cot is free from protrusions and edges that could injure a child (especially its head) if the child fell or rolled onto the protrusion or edge.



- (i) $R1$ shall be ≥ 0.25 mm
- (ii) $R2$, x and y shall be ≥ 1 mm

DIMENSIONS IN MILLIMETRES

FIGURE 3 RADII AND CHAMFERING OF EDGES AND CORNERS

8.9 Textile, mesh and construction strength

The following requirements apply:

- (a) Where the sides and undersides of the folding cot are constructed from textile material, they shall be sufficiently strong to prevent any opening that could pose a finger, limb or head entrapment hazard.
- (b) Where textile materials are sewn together or joined by any other method they shall be sufficiently strong to prevent any openings that could pose a limb or head entrapment hazard.
- (c) All stitching on the sides, ends and underside of the folding cot that are accessible to the child within the folding cot shall be lock-stitched or chain stitched and the key thread shall not be accessible to the child within the folding cot.

NOTES: See Clause 10.17 for requirements.

8.10 Accessories

Accessories that attach to the folding cot, e.g. bassinet (adjustable base), change tables (Clause 8.11) and mosquito nets (Clause 8.13), shall meet the requirements of this Standard. The accessory shall be tested fully with the cot in order to determine that it does not compromise safety. If an accessory, supplied as a separate product, has been tested with the cot and also complies with the requirements of the Standard, the manufacturer is required to state in the labelling supplied with the cot that the accessory is an approved accessory for use with that particular folding cot. The purpose of this is to specify and inform the consumer of those accessories suitable for use with a particular product that will not compromise the safety of the cot. In addition to this, labelling is required to tell the consumer not to purchase accessories unless recommended by the manufacturer.

8.11 Bassinets

In addition to the requirements of Clauses 8.1 to 8.9 that are applicable to bassinets, the following shall apply:

- (a) Any textile material shall not be able to be formed into a pocket that could cover a child's face and pose a suffocation hazard.
- (b) All padding or cushioning material, including the mattress and base, shall be sufficiently firm to preclude its forming to the contours of the occupant's face.
- (c) The base shall be constructed of rigid material, and if it consists of segments, shall not fold or separate when the occupant lays on the surface.
- (d) The mattress and base shall fit snugly as required by Clause 8.1(c). Any gap between rigid segments or components, and any gap between the edge of the mattress and base shall be avoided or made sufficiently small to prevent a baby, sliding under the mattress or base.

8.12 Change table

A change table that is suitable for the folding cot shall not create a head entrapment hazard for a child inside the folding cot or allow the child to fall.

To prevent a baby on the change table falling or a child inside the folding cot being strangled the following shall apply:

- (a) Where a change table is secured to the portable cot, the change table shall be attached to the frame of the folding cot in such a way that it cannot be dislodged inadvertently when the child is on the change table. See Clause 10.18 for test requirements.
- (b) Where a change table is not attached to the folding cot and is engaged with the top of the folding cot, it shall be designed to prevent it from becoming dislodged inadvertently when the child is on the change table. See Clause 10.18 for test requirements.
- (c) A change table may be fitted with a means of securing the change table that can be engaged either manually or automatically to prevent it from sliding or rotating.
- (d) A change table shall have a harness to secure the occupant, equipped with a buckling device or engaging method.
- (e) The change table shall be a box-like structure with barriers on all sides that are at least 70 mm high from the lying surface, and inclined at an angle not greater than 135° from the lying surface.
- (f) There shall be no material or strap on the underside of the change table that can create a pocket or loop having an opening perimeter greater than 360 mm when measured under a tension of 25 ± 2 N.

NOTE: In Clause 10.2 and Appendix A, the potential of entrapment gaps for a child inside the cot are evaluated for gaps that can be created by the change table structure and the top rails of the folding cot when there is no baby on the change table.

8.13 Mosquito net

A mosquito net shall be designed in such a way that it can be fitted securely over the entire top railing and provided with sufficient overlap on all sides. See Clause 10.19 for test requirements.

9 LABELS OR TRANSFERS

Labels and transfers shall not be capable of being removed or torn off by a child without the use of a tool. Labels shall be applied by one of the following methods:

- (a) Sewn along all edges of the label.
- (b) Adhered or welded on all edges of the label.
- (c) Adhered or welded across the whole back of the label.

- (d) Any other method that ensures all edges are attached to the fabric or structure.
- (e) Sewn, adhered or welded along one edge provided any warning notice is printed on the front and reverse side of the label.

NOTE: Labels that do not carry a warning notice and are attached on one edge may be printed on the front side only.

- (f) Attached securely by at least 2 screws, rivets or similar fasteners with heads that are sufficiently large.

NOTES:

- 1 For the purpose of this Clause, a tool may be a pair of scissors, a scraper, a screw driver, a needle or other sharp implement that may assist in unpicking stitching or removing the label.
- 2 This requirement is intended to minimize the risk of a child peeling off parts of the transfer or label that could be inhaled, swallowed or placed over the mouth and nose.

10 SAFETY AND PERFORMANCE REQUIREMENTS

10.1 General

The applicable tests specified in Clauses 10.2 to 10.21 shall be performed in sequence and on the same folding cot in all possible configurations as appropriate. Clause 10.15 applies where there is an accessory such as a bassinet intended to be used with the folding cot.

It may be necessary to repeat earlier tests to fully evaluate the product, i.e. entrapment hazard, ingestion of broken parts hazard.

The entrapment hazard test (Clause 10.2) shall be repeated after the last test in the sequence.

Unless otherwise stated the folding cot shall be assembled or erected according to the manufacturer's instructions.

10.2 Entrapment hazard test

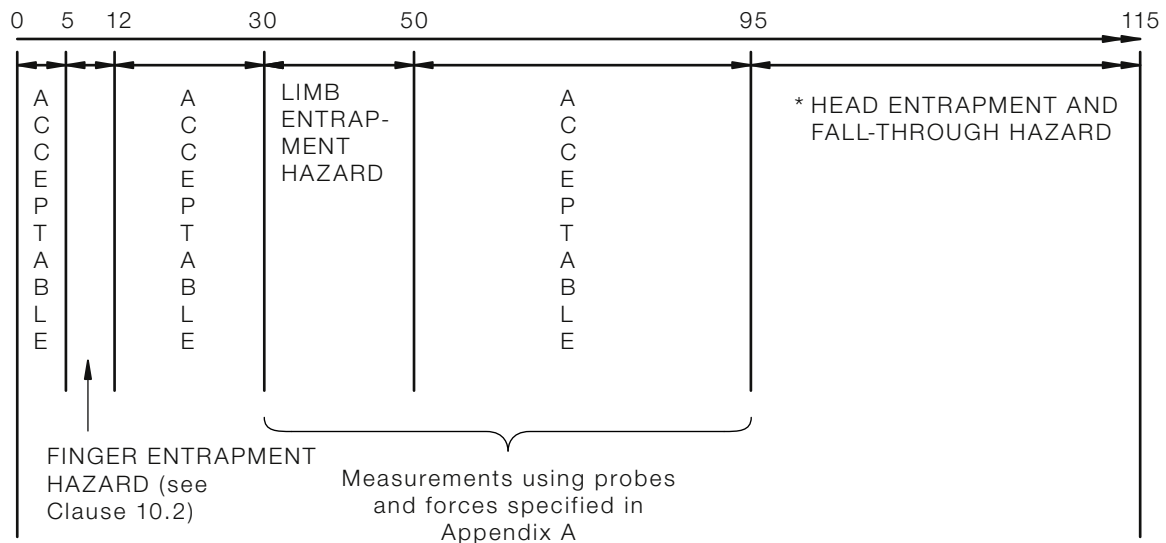
When tested in accordance with Appendix A, all holes and gaps within the folding cot shall be—

- (a) sufficiently large as to allow the 50 mm diameter probe to enter but not allow the 95 mm diameter spherical probe to pass through; or
- (b) sufficiently large as to allow the 12 mm diameter cylindrical probe to enter but not allow the 30 mm diameter probe to enter; or
- (c) sufficiently small as to not to allow the 5 mm diameter cylindrical probe to enter to a distance of at least 10 mm unless it allows lateral movement of the probe by at least 20 mm in any direction.

If a gap between the top rail of the folding cot, and the edge of a bassinet, change table, canopy or mosquito net, fitted in accordance with the manufacturer's instructions, allows the 95 mm diameter spherical probe to pass through, it shall be sufficiently large as to allow Probe B to pass through but not to allow Probe A to pass through.

NOTES:

- 1 When the textile material is constructed of mesh refer to Clause 10.12 for the test and test requirement which ensures that mesh holes do not stretch or break at the seam or in the fabric.
- 2 Figure 4 is a linear representation of gap sizes that pose entrapment hazards.
- 3 Clauses 8.1, 8.5.2 and 10.12 specify the dimensions of other gaps.



* Includes gaps 115 to 223 mm that are adjacent to the upper side rails or frame of the folding cot that are at a height of not greater than 400 mm from the mattress base. See Clause 10.2.

DIMENSIONS IN MILLIMETRES

FIGURE 4 LINEAR REPRESENTATION OF HAZARDOUS OPENINGS

10.3 Stability test

When tested in accordance with the stability test in AS/NZS 2172 using the mattress and base supplied, no legs of the folding cot shall lift off the floor.

10.4 Strength test

When tested in accordance with Appendix B, no components of the folding cot shall suffer any breakage, permanent deformation, joint failure or any structural damage affecting safety or function.

10.5 Folding test/frame test

When tested in accordance with Appendix C, the folding cot shall not fold, and no element of the folding cot shall suffer any breakage, joint failure or any structural damage affecting safety or function. No part of the frame shall have any permanent deflection greater than 50 mm. All locking mechanisms shall remain operational.

10.6 Impact test

When tested in accordance with Appendix D, no components of the folding cot shall suffer any breakage, permanent deformation, failure or any structural damage affecting safety or function. All locking mechanism shall remain operational.

10.7 Strength of frame and fastenings—Fatigue test

When tested in accordance with Appendix E, no components of the folding cot shall suffer any fracture, permanent deformation or failure, or any structural damage affecting safety of function.

10.8 Strength of frame and fastenings—Vertical static load test

When tested in accordance with Appendix F, no components of the folding cot shall suffer any fracture, permanent deformation, or any structural damage affecting safety of function.

10.9 Locking mechanism test

For cots in which the release of a top rail locking mechanism automatically activates the folding mechanism, when tested in accordance with Appendix G, the residual force to release the top rail locking mechanism shall be not less than 50 N. After testing, the top rail mechanism shall continue to comply with Clause 8.5.

NOTE: The intention of this Clause is that a child should not be able to release a locking mechanism as at least 50 N force is needed.

10.10 Detachable parts test

When tested in accordance with Appendix H, any part that can be detached shall not fit wholly within the test cylinder.

10.11 Bite test

If the folding cot has a padded rim, when tested in accordance with Appendix I, the textile material covering the rim shall not be cut or punctured. Marking of the surface, such as a dent, shall not constitute a failure.

10.12 Test for opening in fabric and mesh

When tested in accordance with Appendix J the following apply:

- A1 |
- (a) The openings in mesh or other breathable fabric used in the breathable zones as required by Clause 8.2, shall accept the 1.5 mm diameter test probe when applied with a force of not greater than 1 N.
 - (b) The openings in mesh or other breathable fabric used in the breathable zones as required in Clause 8.2 and anywhere else on the sides and ends of the folding cot or bassinet, shall not accept the 5 mm diameter test probe when applied with a force of 30 N.

In addition, no seam shall loosen as a result of the force of the probe and no threads of the mesh or breathable fabric shall break.

10.13 Mesh foothold test

The following apply when mesh and adjacent structures are tested in accordance with Appendix K:

- (a) For a surface inclined at less than 55° to the horizontal, the template shall not be able to be positioned with four or more adjacent marked triangles in simultaneous contact with the surface or the projected area.
- (b) For a surface inclined at less than 55° to the horizontal, the template shall not be able to be positioned such that a line of contact or projection can be obtained extending between the two thicker markings on the template.
- (c) For a surface inclined at between 55° and 80°, the template shall not be able to be positioned such that there is an area or line of contact or projection as described in Item (a) or (b) above, and so that there is a point of support on any surface that is no further away than the width of the template. This test shall be applied to the internal sides and ends of the folding cot up to 500 mm above the top surface of the mattress.

10.14 Folding side entrapment test

When tested in accordance with Appendix L, there shall be no gaps between any elements of the side rails of the cot where the side elements are inclined to each other at an angle of less than 90 degrees or which are less than 80 mm wide when measured at the 80 mm region between 20 mm and 100 mm from the lowest point of the gap.

NOTE: The intention of this requirement is to ensure that if the sides of a cot begin to fold while a child is present in the cot that no entrapment points are formed in the folding sides which could lead to strangulation or injury.