

Specification for

Safety requirements for playpens for domestic use

Committees responsible for this British Standard

The preparation of this British Standard was entrusted by the Consumer and Contract Goods Standards Policy Committee (CCM/-) to Technical Committee CCM/41, upon which the following bodies were represented:

- Association for Consumer Research (ACRE)
- Baby Products Association
- British Association of Nursery and Pram Retailers
- British Retailers' Association
- Child Accident Prevention Trust
- Consumer Policy Committee of BSI
- Department of Education and Science
- Department of Trade and Industry (Consumer Safety Unit, CA Division)
- Furniture Industry Research Association
- Institute of Trading Standards Administration
- Royal Society for the Prevention of Accidents

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Foreword

This British Standard has been prepared under the direction of the Consumer and Contract Goods Standards Policy Committee. It supersedes BS 4863:1973, which is withdrawn.

The scope of this new edition has been extended to include mesh sided playpens, which have increased in popularity since the publication of the first edition.

A British Standard does not purport to include all the necessary provisions of a contract. Users of British Standards are responsible for their correct application.

Compliance with a British Standard does not of itself confer immunity from legal obligations.

In particular attention is drawn to the following.

Statutory Instrument No. 1324 The Furniture and Furnishings (Fire) (Safety) Regulations 1988

Statutory Instrument No. 2358 The Furniture and Furnishings (Fire) (Safety) (Amendment) Regulations 1989

Statutory Instrument No. 1275 The Toys (Safety) Regulations 1989

Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, pages 1 to 16, an inside back cover and a back cover.

This standard has been updated (see copyright date) and may have had amendments incorporated. This will be indicated in the amendment table on the inside front cover.

1 Scope

This British Standard specifies safety requirements for playpens for use by children up to approximately 15 kg in weight. It covers both rigid sided and mesh sided playpens.

NOTE 1 Guidance on the selection and use of materials is given in Appendix A.

NOTE 2 The titles of the publications referred to in this standard are listed on the inside back cover.

2 Definition

For the purposes of this British Standard the following definition applies.

playpen

an enclosure intended to retain a child whilst allowing it space to play in for short periods

3 Materials

3.1 Plastics

Plastics on any part of the playpen shall not contain any soluble antimony, arsenic, barium, cadmium, chromium, lead or mercury or any soluble compound of any of those elements which exceeds the following amounts when determined in accordance with **8.2** and **9.2** of BS 5665-3:1989:

antimony	250 mg/kg;
arsenic	100 mg/kg;
barium	500 mg/kg;
cadmium	100 mg/kg;
chromium	100 mg/kg;
lead	250 mg/kg;
mercury	100 mg/kg.

3.2 Coatings and finishes

Any coating of paint, varnish, lacquer or similar substance on any part of the playpen shall not contain any soluble antimony, arsenic, barium, cadmium, chromium, lead or mercury, or any soluble compound of any of those elements which exceeds the following amounts when determined in accordance with **8.1** and **9.1** of BS 5665-3:1989:

antimony	250 mg/kg;
arsenic	100 mg/kg;
barium	500 mg/kg;
cadmium	100 mg/kg;
chromium	100 mg/kg;
lead	250 mg/kg;
mercury	100 mg/kg.

Where a surface is coated with a multilayer of paint or similar coating the sample shall be taken down to the substrate.

3.3 Dyed textiles

Dyed textiles used in any part of the playpen, when tested in accordance with method E04 of BS 1006, shall give a numerical rating for change in colour of not less than 4 and a staining of not less than 3.

3.4 All materials

Where different parts of the playpen are coated with different materials, and it is possible to obtain at least 10 mg of that coating from a single playpen, the coating of each part shall meet the requirements of **3.1** and **3.2**.

3.5 Filling materials

Any filling materials shall comply with **3.1.4** of BS 5665-1:1989.

3.6 Fabrics and fabric assemblies

When tested in accordance with Appendix B, any textile fabric forming an integral part of the playpen, excluding the mattress, shall comply with the following flammability performance requirements:

- none of the six specimens shall sever the 300 mm trip thread in less than 10 s;
- none of the six specimens shall sever the 600 mm trip thread in less than 20 s.

If any one of the six specimens tested fails to comply with either performance requirement, then a further six specimens shall be tested. None of the second group of specimens shall fail to comply with either of the performance requirements.

4 Moisture content and conditioning

Before any of the tests specified in this standard are carried out the playpen shall be conditioned in accordance with **3.2** of BS 4875-1:1985.

5 Construction

5.1 General

5.1.1 The playpen shall not contain any open-ended tubes, projections, holes, loose washers, speed fixings, nuts or crevices, on or in which the child's body or any part of the body or clothing could become snagged or trapped. Any vertical projection shall not exceed 6 mm and shall have a minimum radius of 6 mm. Accessibility shall be determined in accordance with Appendix C.

5.1.2 If the playpen can be folded it shall not fold when tested in accordance with Appendix D. When the playpen is erected for use, the locking mechanism shall either:

- a) require a minimum force of 50 N to release the mechanism; or
- 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
- c) require at least two separate but simultaneous actions to release the mechanism, operating on different principles.

5.1.3 Any permanent fixture that can be gripped by a child's fingers or teeth shall be attached to the playpen in such a manner that it cannot be removed or broken by applying a force of 90 N in any direction to the fixture. Any part of the playpen that is essential for its safe use shall be attached in such a manner that it cannot be broken or displaced so as to cause a hazard when a force of 90 N is applied in any direction to that part.

5.1.4 Any screws, fastenings or mechanisms, except those covered by **5.1.2**, located inside the playpen shall not be capable of being adjusted except by the use of a tool.

5.1.5 Screws that cut a thread directly into a wooden component of the playpen shall not be used if intended to be removed when dismantling the playpen for purposes of transportation or storage.

5.1.6 Any rigid sheet material having exposed edges shall be not less than 0.5 mm thick. All edges, corners and projecting parts that are accessible shall be smooth and free from burrs and be constructed in order to minimize the risk of a wound or abrasion.

5.1.7 Any flexible plastics sheet material shall not contain bubbles or blisters and shall be free from creases of a permanent nature, streaks, pinholes and specks of foreign matter.

5.1.8 If the playpen has a padded rim, when tested in accordance with Appendix E, the material covering the rim shall not be cut or punctured.

Marking of the surface shall not constitute a failure.

5.1.9 The playpen frame shall be provided with some form of floor which shall cover the complete base area. The top surface of the floor of the playpen shall be a maximum of 200 mm above the ground. If the floor is detachable, there shall be provision for it to be firmly fixed when in use. Where the floor is covered by a plastics material that material shall comply with **5.1.7**. There shall be no projections greater than 3 mm in height through the structural floor of the playpen.

5.1.10 The minimum distance between the floor of the playpen and the top edge of the sides of the playpen shall be not less than 600 mm. There shall be a continuous band with a minimum vertical dimension of 495 mm, when measured from the upper surface of the lower horizontal member to the upper surface of the uppermost horizontal member, around the complete perimeter of the playpen, within which there shall be no horizontal member.

5.1.11 Castors shall not be fitted.

5.1.12 Any part of the playpen that is designed or suitable to be used as a child's plaything shall comply with BS 5665. It shall also comply with **5.1.1**, **5.1.3**, **5.1.4**, **5.1.6** and **5.1.10** of this standard. Any toy that is designed to be a permanent fixture to the playpen shall not become detached when a force of 150 N is applied.

NOTE Attention is also drawn to Statutory Instrument No. 1275 The Toys (Safety) Regulations 1989.

5.1.13 All staples shall be loaded in shear and shall be fully driven home.

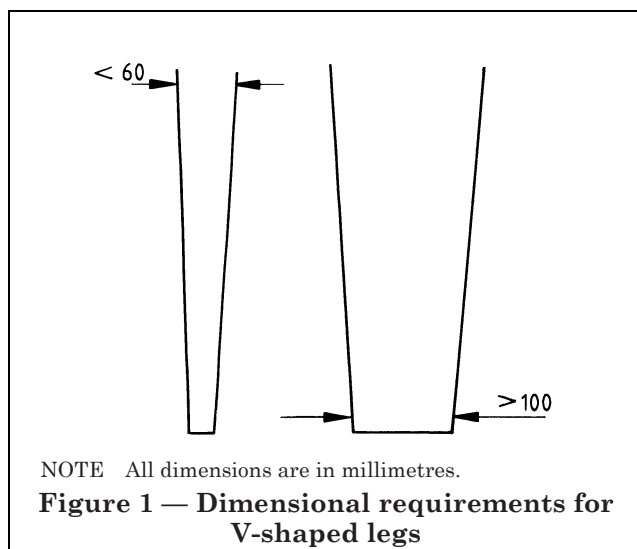
5.1.14 If ties are used to attach a mattress to the base of the playpen each set of ties shall comprise two separate lengths of material, each having a free length of not more than 250 mm. The ends of the ties shall be turned in or sealed to prevent unravelling. Ties shall not become detached and there shall be no tearing of the fabric of the mattress when a force of 70 N is applied within 5 s and maintained for 10 s. Monofilament sewing thread shall not be used to attach the ties.

NOTE A single length of material, of greater than 250 mm in length, joined to the mattress at its mid-point so as to provide two ties, could present a hazard in the event of it becoming detached from the mattress.

5.1.15 Where V-shaped legs are used to support the playpen they shall be on the outside of the playpen and shall comply with the following:

- a) the lower intersection of two members coming together shall not join at an angle of less than 90°.
- b) two tapering legs shall always be less than 60 mm or always more than 100 mm apart (see Figure 1);
- c) the base of the playpen shall not be smaller than the internal dimensions at the rim when the major and minor axes are in alignment.

NOTE Requirements a) and b) have been included to avoid entrapment hazards.



5.2 Additional requirements for rigid sided playpens

The spacing, measured at any point between adjacent bars or slats, shall be not less than 50 mm and not more than 100 mm. The difference between the maximum and minimum diameter or maximum and minimum width of any one member shall not exceed 7.5 mm. Adjacent bars or slats shall not be out of parallel between centres by more than 5 mm.

5.3 Additional requirements for mesh sided playpens

5.3.1 When tested in accordance with Appendix F the probe shall not pass through the mesh and the threads of the mesh shall not break.

5.3.2 There shall be no openings in the side of the playpen except those complying with **5.3.1**.

5.3.3 Any feature attached to the mesh shall not protrude inwards by more than 6 mm.

6 Stability

When tested in accordance with **G.2.1** the legs of the playpen opposite to those against the stops shall not lift from the floor. When tested in accordance with **G.2.2** the playpen shall not overturn.

7 Strength

7.1 When tested in accordance with **H.1** there shall be no permanent deflection greater than 5 mm and the playpen shall show no signs of damage.

7.2 The spacings between adjacent vertical bars or slats on rigid sided playpens shall comply with **5.2** before, during and after testing in accordance with **H.2**. The force applied shall not produce any permanent distortion in excess of 5 mm in any of the horizontal rails and shall not damage or loosen any fittings. The amount of movement of the frame (dimension *a* in Figure 9) shall be not more than 25 mm after testing in accordance with **H.2.3**.

8 Impact

The playpen shall show no signs of permanent damage or distortion in excess of 5 mm when tested in accordance with Appendix J.

The playpen shall show no signs of permanent damage or distortion and rigid sided playpens shall still comply with **5.2** after testing in accordance with Appendix K.

9 Packaging

9.1 Any plastics covering used as packaging for the playpen shall be conspicuously marked with a warning to the effect that the covering should be kept away from babies and children.

NOTE An example of suitable wording is as follows.

“To avoid danger of suffocation, remove this plastics cover before using the article. This cover then should be destroyed or kept away from babies and children.”

9.2 Plastics used as packaging shall be not less than 38 μ m thick unless the packaging comes into one or more of the following categories:

- bags with an opening perimeter of less than 380 mm;
- shrunk-on film packaging that is normally destroyed when the packaging is opened by the user;
- bags made of perforated film that makes it possible for the child to breathe through the film and that is unable to form a vacuum and stick to the face of the child. To comply with this requirement any area of maximum dimensions 30 mm $\times$ 30 mm shall have a total minimum hole area of 1 %.

10 Marking

Playpens complying with this standard shall be permanently and conspicuously marked with the following.

- The name, trade mark or other means of identification of either the UK manufacturer, UK distributor or UK retailer.