

Standard Consumer Safety Specification for Non-Full-Size Baby Cribs/Play Yards¹

This standard is issued under the fixed designation F406; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ε) indicates an editorial change since the last revision or reapproval.

INTRODUCTION

This consumer safety specification addresses incidents associated with non-full-size cribs/play yards that were identified by the U.S. Consumer Product Safety Commission (CPSC).

Incidents identified by the CPSC and addressed in this standard include asphyxiation due to entrapment in mesh drop side units left with a side down, strangulation by entanglement on protruding hardware, strangulation by button entrapment in mesh openings, strangulation due to failure of the center hinge on a top rail, collapse or failure of the locking devices, collapse of the floor or sides, and choking on vinyl bitten from the top rail. This specification also addresses wooden non-full-size crib injuries or deaths due to entanglement on corner post extensions, dislodgment of slats resulting from breakage or failure of glue joints, collapse of mattress support, detachment of screws, dislodgement of teething rails, and entanglement on cords or strings.

This specification is not intended to cover non-full-size cribs/play yards that are either blatantly misused or abused. This specification is written within current state-of-the-art of non-full-size crib/play yard technology and is intended to be updated if substantive information becomes available that necessitates additional requirements or justifies revision of existing requirements.

1. Scope

1.1 This consumer safety specification establishes testing requirements for structural integrity and performance requirements for non-full-size cribs/play yards, both rigid sided and mesh/fabric assemblies. It also provides requirements for labeling and instructional material. The term unit or product will refer to a non-full-size crib/play yard.

1.2 This specification covers a framed enclosure with a floor made for the purpose of providing sleeping and playing accommodations for a child who cannot climb out and is less than 35 in. (890 mm) in height. It also covers bassinet, changing table, or similar accessories to a non-full size crib/play yard. These accessories shall also comply with the applicable requirements of ASTM standards addressing those accessories. For example, a changing table that attaches to a play yard shall also comply with the applicable requirements in Specification F2388. This specification does not cover inflatable products.

1.3 No product produced after the approval date of this consumer safety specification shall, either by label or other

means, indicate compliance with this specification unless it conforms to all applicable requirements contained herein, before and after all testing.

1.4 The values stated in inch-pound units are to be regarded as standard. The values given in parentheses are mathematical conversions to SI units that are provided for information only and are not considered standard.

1.5 The following safety hazards caveat pertains only to the test method portion, Section 8, of this specification: *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.*

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2. Referenced Documents

2.1 ASTM Standards:²

D1424 Test Method for Tearing Strength of Fabrics by Falling-Pendulum (Elmendorf-Type) Apparatus

D1683 Test Method for Failure in Sewn Seams of Woven Apparel Fabrics

D3359 Test Methods for Measuring Adhesion by Tape Test D5034 Test Method for Breaking Strength and Elongation of Textile Fabrics (Grab Test)

F963 Consumer Safety Specification for Toy Safety

F1004 Consumer Safety Specification for Expansion Gates and Expandable Enclosures

² For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.

- F1487 Consumer Safety Performance Specification for Playground Equipment for Public Use
- F2388 Consumer Safety Specification for Baby Changing Tables for Domestic Use
- 2.2 EN Standards:³
- EN 716–1:1995 Cots and Folding Cots for Domestic Use
- EN 12227–1:1999 Playpens for Domestic Use
- 2.3 ISO Standard:⁴
- ISO 8124-1:2000 Safety Aspects Related to Mechanical and Physical Properties
- 2.4 Federal Regulations:⁵
- 16 CFR 1303 Ban of Lead-Containing Paint and Certain Consumer Products Bearing Lead-Containing Paint
- 16 CFR 1500 Hazardous Substances Act Regulations including sections:
 - 1500.3 (c) (6) (vi) Definition of "Flammable Solid"

1500.44 Method for Determining Extremely Flammable and Flammable Solids

1500.48 Technical Requirements for Determining a Sharp Point In Toys and Other Articles Intended for Use By Children Under Eight Years of Age

1500.49 Technical Requirements for Determining a Sharp Metal or Glass Edge in Toys or Other Articles Intended for Use By Children Under Eight Years of Age

1500.50-.52 Test Methods for Simulating Use and Abuse of Toys and Other Articles Intended for Use By Children

16 CFR 1501 Method for Identifying Toys and Other Articles Intended for Use By Children Under Three Years of Age Which Present Choking, Aspiration, or Ingestion Hazards Because of Small Parts

16 CFR 1509 Requirements for Non-Full-Size Baby Cribs

3. Terminology

3.1 Definitions of Terms Specific to This Standard:

3.1.1 accessory, *n*—component with a rigid frame such as a bassinet or changing table that attaches to a non-full size crib/play yard and that, because of its structure, location, or movement, may expose a non-full size crib/play yard occupant to an opening presenting an entrapment hazard. It does not include: (1) items that hang outside the occupant areas, such as organizers and storage bags, (2) canopies that have no rigid frame members running alongside any top rail, and (3) accessories that attach only to another attachment and not directly to the non-full size crib/play yard.

3.1.1.1 *Discussion*—Rationale: Definition applies only to accessories that attach to non-full size crib/play yard, not accessories that attach to bassinet or changing table. This would exclude a changing table that attaches only to a bassinet, since a bassinet occupant is not able to push up on hands and knees, and therefore is not at risk from an entrapment hazard.

3.1.2 accessory attachment components, n—the components that provide the means of attachment for a bassinet/cradle accessory to a play yard. (See Fig. A1.1.)

3.1.3 *bassinet/cradle accessory*, *n*—an elevated sleep surface that attaches to play yard designed to convert the product into a bassinet/cradle intended to have a horizontal sleep surface while in a rest (non-rocking) position.

3.1.4 *cantilevered accessory*, *n*—accessory that is supported and attached at only one end of the component to a non-full size crib/play yard (see Fig. A1.2).

3.1.5 *conspicuous, adj*—Describes a label that is visible, when the unit is in a manufacturer's recommended use position, to a person standing near the unit at any one position around the unit but not necessarily visible from all positions.

3.1.6 *cord*, *n*—length of slender flexible material including monofilaments, rope, woven and twisted cord, plastic and textile tapes, ribbon, and those materials commonly called string.

3.1.7 *corner post, n*—vertical post located at the corner of a product.

3.1.8 *dropgate*, n—side that is intended to pivot with respect to the frame when the product is in the manufacturer's recommended use position to provide easier access to the occupant.

3.1.8.1 *Discussion*—Rationale: The word "telescope" was deleted because telescoping sides are really covered under the definition of movable sides. Dropgates are products that pivot only. For reference, the definition of movable side in Consumer Safety Specification F406 is "top portion of an otherwise stationary side that is intended to move with respect to the frame (other than a foldable side) when the product is in the manufacturer's recommended use position to provide easier access to the occupant.

3.1.9 *dynamic load, n*—application of an impulsive force through free fall of a weight.

3.1.10 *fabric*, *n*—any woven, knit, coated, laminated, extruded or calendered flexible material that is intended to be sewn, welded, heat sealed, or glued together as an assembly.

3.1.11 *foldable side or end*, *n*—side or end panel intended to be stationary with respect to the frame when a product is in the manufacturer's recommended use position, but that folds to allow for carrying or storage of the product.

3.1.12 key structural elements, *n*—side assemblies, end assemblies, mattress supports or stabilizing bars which create the occupant retention area.

3.1.13 manufacturer's recommended use position, n—Any position that is presented by the manufacturer in any descriptive or instructional literature as a normal, allowable, or acceptable configuration for use of the product. This specifically excludes positions that the manufacturer shows in a like manner in its literature to be unacceptable, unsafe, or not recommended.

3.1.14 *mattress*, *n*—pad with a fabric, vinyl, or other material case filled with resilient material (such as cotton, foam, fiberfill, etc.) used as or on the floor of the unit.

³ Available from American National Standards Institute (ANSI), 25 W. 43rd St., 4th Floor, New York, NY 10036.

⁴ Available from International Organization for Standardization (ISO), 1 rue de Varembé, Case postale 56, CH-1211, Geneva 20, Switzerland.

⁵ Available from U.S. Government Printing Office Superintendent of Documents, 732 N. Capitol St., NW, Mail Stop: SDE, Washington, DC 20401.