



Designation: ~~F2194-07~~ Designation: F 2194 – 07a<sup>ε1</sup>

## Standard Consumer Safety Specification for Bassinets and Cradles<sup>1</sup>

This standard is issued under the fixed designation F 2194; 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 ( $\epsilon$ ) indicates an editorial change since the last revision or reapproval.

---

---

<sup>ε1</sup> NOTE—Paragraph 9.1.2 was corrected editorially in December 2007.

---

---

### INTRODUCTION

This consumer safety performance specification addresses infant bassinet and cradle incidents identified by the U.S. Consumer Product Safety Commission (CPSC).

In response to the incident data compiled by the CPSC, this consumer safety performance specification attempts to minimize the following hazards: (1) suffocation, (2) tip over, (3) collapse, and (4) hood detachment. ~~This specification does not cover products that are blatantly misused or used in a careless manner that disregards the safety instructions and warnings provided with each bassinet or cradle.~~ It also addresses corner post extensions, which may catch pacifier cords, ribbons, necklaces, or clothing which a child may be wearing and which may be caught on a projection. ~~This specification does not cover products that are blatantly misused or used in a careless manner that disregards the safety instructions and warnings provided with each bassinet or cradle.~~

### 1. Scope

1.1 This consumer safety performance specification covers performance requirements, test methods, and marking requirements to promote safe use of bassinets and cradles.

1.2 This consumer safety performance specification is intended to minimize the risks of incidents to an infant resulting from normal use and reasonably foreseeable misuse of a bassinet or cradle.

1.3 This consumer safety performance specification covers products intended to provide sleeping accommodations (excluding full-size cribs or swings) for an infant up to approximately 5 months in age. Products used in conjunction with an infant swing are not covered by this specification.

1.4 No bassinet or cradle produced after the approval date of this consumer safety performance specification shall, either by label or other means, indicate compliance with this specification unless it conforms to all requirements contained herein.

1.5 This consumer safety performance specification is not intended to address incidents and injuries resulting from alteration or unreasonable abuse or misuse of the product by a child or child care giver.

1.6 The following precautionary caveat pertains only to the test method portion Section 7 of this consumer safety performance 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 requirements prior to use.*

### 2. Referenced Documents

#### 2.1 ASTM Standards:<sup>2</sup>

D 3359 Test Methods for Measuring Adhesion by Tape Test

F 406 Consumer Safety Specification for Non-Full-Size Baby Cribs/Play Yards

F 963 Consumer Safety Specification for Toy Safety

~~F 966 Consumer Safety Specification for Full-Size and Non-Full-Size Baby Crib Corner Post Extensions~~ Consumer Safety Specification for Toy Safety

#### 2.2 Federal Regulations:<sup>3</sup>

---

<sup>1</sup> This specification is under the jurisdiction of ASTM Committee F15 on Consumer Products and is the direct responsibility of Subcommittee F15.18 on Cribs, Toddler Beds, Play Yards, Bassinets, Cradles and Changing Tables.

Current edition approved Feb. 1, 2007. Published March 2007. Originally approved in 2002. Last previous edition approved in 2006 as F 2194 – 067.

<sup>2</sup> For referenced ASTM standards, visit the ASTM website, [www.astm.org](http://www.astm.org), or contact ASTM Customer Service at [service@astm.org](mailto:service@astm.org). For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.

<sup>3</sup> Available from U.S. Government Printing Office Superintendent of Documents, 732 N. Capitol St., NW, Mail Stop: SDE, Washington, DC 20401.



FIG. 1 CAMI Infant Dummy, Mark II 17.5 lb (7.9 kg)

- 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
- 16 CFR 1500.48 Technical Requirements for Determining a Sharp Point in Toys and Other Articles for Use by Children Under Eight Years of Age
- 16 CFR 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
- 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

2.3 Other References:

CAMI Dummy, MARK II (see Fig. 1)<sup>4</sup>

**3. Terminology**

3.1 Definitions:

3.1.1 *bassinet/cradle, n*—small bed for infants supported by free standing legs, a wheeled base, a rocking base, or which can swing relative to a stationary base.

3.1.2 *bassinet/cradle attachment, n*—accessory with a rigid frame that attaches to non-full size crib/play yard designed for sleeping.

<sup>4</sup> Department of Transportation Memorandum Report AAC-119-74-14, Revision II, Drawing No. SA-1001 by Richard Chandler, July 2, 1974. Federal Aviation Administration, Civil Aeromedical Institute, Protection and Survival Laboratory, Aeromedical Center, Oklahoma City, OK 73125.

3.1.3 *conspicuous, adj*—describes a label that is visible, when the bassinet/cradle is in a manufacturer's recommended use position, to a person standing near the bassinet/cradle at any one position around the bassinet/cradle but not necessarily visible from all other positions.

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

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

3.1.6 *mesh, n*—mesh may be either a woven fabric in which the warp and filling yarns are interlaced, knitted fabric in which the wales and courses yarns are interlocked, or any other type of fabric that may be developed that provides openings therein.

3.1.7 *non-paper label, n*—any label material (such as plastic or metal) that either will not tear without the aid of tools or tears leaving a sharply defined edge.

3.1.8 *occupant, n*—that individual who is in a product that is set up in one of the manufacturer's recommended use positions.

3.1.9 *paper label, n*—any label material that tears without the aid of tools and leaves a fibrous edge.

3.1.10 *seam, n*—means for joining fabric components, such as sewing, welding, heat sealing, or gluing.

3.1.11 *static load, n*—vertically downward force applied by a calibrated force gauge or by dead weights.

#### 4. Calibration and Standardization

4.1 All testing shall be conducted on a concrete floor that may be covered with 1/8-in. (3-mm) thick vinyl flooring cover, unless the test instructs differently.

4.2 The product shall be completely assembled, unless otherwise noted, in accordance with the manufacturer's instructions.

4.3 No testing shall be conducted within 48 h of manufacturing.

4.4 The product to be tested shall be in a room with ambient temperature of  $73 \pm 9^\circ\text{F}$  ( $23 \pm 5^\circ\text{C}$ ) for at least 1 h prior to testing. Testing then shall be conducted within this temperature range.

4.5 All testing required by this specification shall be conducted on the same unit.

#### 5. General Requirements

5.1 *Lead in Paints*—The paint or surface coating on the product shall comply with 16 CFR 1303.

5.2 *Hazardous Sharp Edges or Points*—There shall be no hazardous sharp points or edges as defined by 16 CFR 1500.48 and 16 CFR 1500.49 before and after testing to this consumer safety specification.

5.3 *Small Parts*—There shall be no small parts as defined by 16 CFR 1501 before testing or liberated as a result of testing to this specification.

5.4 *Wood Parts*—Prior to testing, any exposed wood parts shall be smooth and free of splinters.

5.5 *Scissoring, Shearing, or Pinching*—A product, when in the manufacturer's recommended use position shall be designed and constructed so as to prevent injury to the occupant from scissoring, shearing, or pinching when members or components rotate about a common axis, or fastening points, slide, pivot, fold or otherwise move relative to one another. Scissoring, shearing, or pinching that may cause injury shall not be permissible when the edges of any rigid parts admit a probe that is greater than a 0.210-in. (5.33-mm) and less than a 0.375-in. (9.53-mm) diameter at any accessible point throughout the range of motion of such parts.

5.6 *Unintentional Folding*:

5.6.1 Products designed without latching or locking devices must remain in the manufacturer's recommended use position during and upon completion of the test, in accordance with 7.5.1.

5.6.2 Products designed with a single action release mechanism latching or locking devices must remain in the manufacturer's recommended use position during and upon completion of the test, in accordance with 7.5.2.

5.6.3 Products with a double action release mechanism latching or locking device shall require two distinct and separate actions for release of the mechanism.

5.7 *Openings*—Holes or slots that extend entirely through a wall section of any rigid material less than 0.375-in. (9.53-mm) thick and admit a 0.210-in. (5.33-mm) diameter rod shall also admit a 0.375-in. (9.53-mm) diameter rod. Holes or slots that are between 0.210-in. (5.33-mm) and 0.375-in. (9.53-mm) and have a wall thickness less than 0.375 in. (9.53 mm) but are limited in depth to 0.375-in. (9.53-mm) maximum by another rigid surface shall be permissible (see Fig. 2). The product shall be evaluated in all manufacturer's recommended use positions.

5.8 *Labeling*:

5.8.1 Warning labels (whether paper or non-paper) shall be permanent when tested in accordance with 7.2.1-7.2.3.

5.8.2 Warning statements applied directly onto the surface of the product by hot stamping, heat transfer, printing, wood burning, etc. shall be permanent when tested in accordance with 7.2.4.1-7.2.4.3.

5.8.3 Non-paper labels shall not liberate small parts when tested in accordance with 7.2.5.

5.9 *Fasteners*—Woodscrews shall not be used in the assembly of any components that must be removed by the consumer in the normal disassembly of a bassinet/cradle.

5.10 *Corner Post Extensions*—~~The product must meet the Consumer Safety Specification F966~~ Corner Posts:

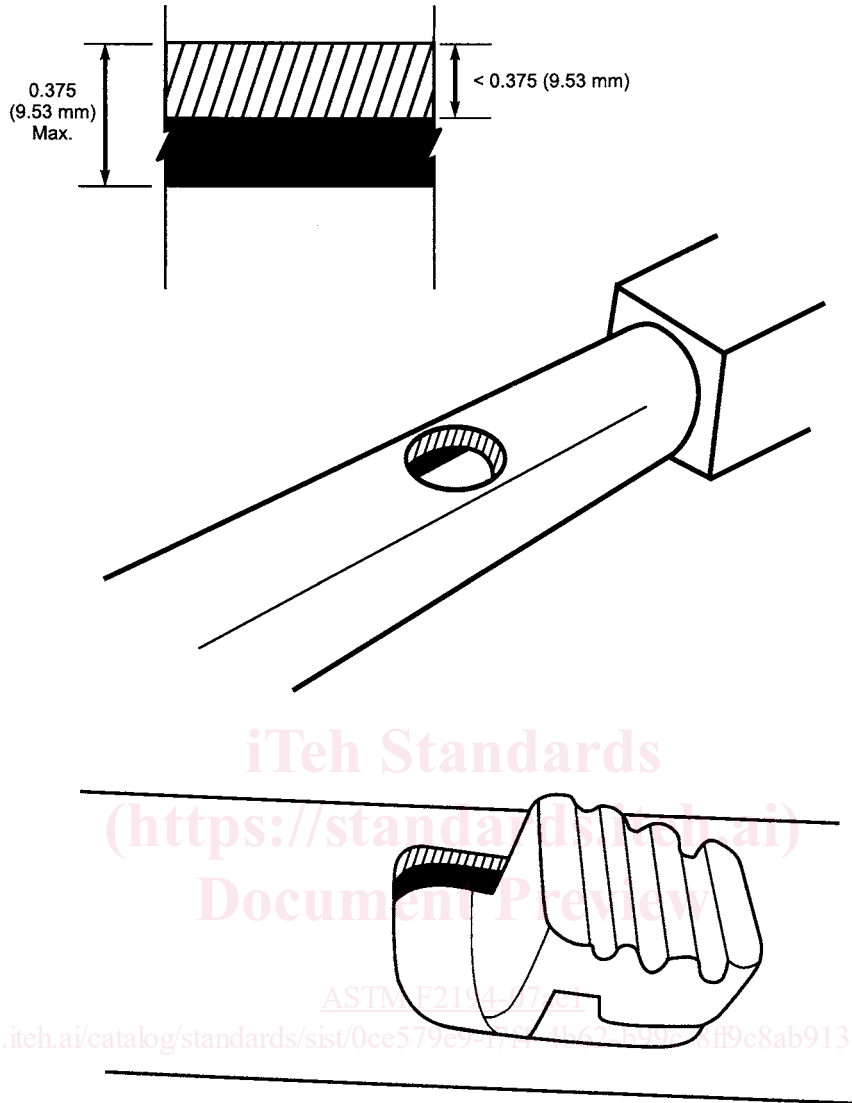


FIG. 2 Opening Example

5.10.1 No corner post assembly shall extend more than 0.06 in. (1.5 mm) above the upper edge of an end or side panel, whichever is higher, when measured from the lowest point on the upper edge of the end panel within 3 in. (76 mm) from the outermost contour of the elbow (see Fig. 3).

5.10.2 The limitations in 5.10.1 do not apply to a corner post assembly that extends at least 16 in. (406 mm) above the uppermost surface of the side rail in its highest position.

5.10.2.1 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 5.10.2.

5.11 Toys—Toy accessories attached to, removable from, or sold with a bassinet or cradle, as well as their means of attachment, must meet the applicable requirements of Consumer Safety Specification F 963.

5.12 Bassinet/Cradle Attachment to Play Yard/Non-Full-Sized Crib—Bassinet attachment intended to be attached to, removable from, sold with or separately from a play yard or non-full-sized crib shall comply with the requirements of this specification and Consumer Safety Specification F 406 when attached in the manufacturer’s recommended use position.

## 6. Performance Requirements

6.1 Spacing of Rigid Sided Bassinet/Cradle Components —Spacing must comply with 16 CFR Part 1509 Section 1509.4 when tested according to 7.1.

6.2 Openings for Mesh/Fabric Sided Bassinet/Cradle —Openings in the mesh shall be designed to prevent entrapment of