



## Standard Consumer Safety Specification for Play Yards<sup>1</sup>

This standard is issued under the fixed designation F 406; 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.

### INTRODUCTION

This consumer safety specification addresses the play yard incidents that were identified by the U.S. Consumer Product Safety Commission (CPSC).

In response to play yard-related incidents reported to the National Electronic Injury Surveillance System (NEISS), this consumer safety specification attempts to minimize falls from play yards by requirements for height of sides, rails strength, and warnings; scissoring, shearing, and pinching injuries; strangulation by button entrapment in mesh openings; entrapment of body parts in holes or between slats; collapse of the floor or sides; choking on vinyl bitten from the top rail; failure of locking devices; and, suffocation in loose mesh or drop side models left with a side down in the down position.

This consumer safety specification is not intended to cover play yards that are either blatantly misused or used in a careless manner that disregards the safety instructions in the warning statement provided with each play yard.

This consumer safety specification is written within the current state-of-the-art of play yard technology. The intent is to update this consumer safety specification when ever substantive information becomes available which necessitates additional requirements or justifies revising the existing requirements.

### 1. Scope

1.1 This consumer safety specification establishes performance requirements, test methods, and marking requirements intended to enhance the safe construction and use of the play yards with the child inside or outside of the unit.

1.2 This consumer safety specification is to minimize injuries to children resulting from use and reasonably foreseeable misuse or abuse of play yards.

1.3 This consumer safety specification is not intended to address incidents and injuries resulting from the interaction of older children with children in the play yard or accidents resulting from the abuse or misuse by persons who exceed the physical criteria in 1.4.

1.4 For the purpose of this consumer safety specification, a play yard is a framed enclosure with a floor made for the purpose of containing a child who is unable to climb out of the play yard and having a height of 35 in. (890 mm) or less, or weighing not more than 30 lb (14 kg).

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

1.6 The values stated in inch-pound units are to be regarded as the standard. The values in parentheses are provided for information only.

1.7 The following precautionary caveat pertains only to the test methods portion, Section 10, 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.*

### 2. Referenced Documents

#### 2.1 ASTM Standards:

D 1424 Test Method for Tearing Strength of Fabrics by Falling-Pendulum Type (Elmendorf) Apparatus<sup>2</sup>

D 1683 Test Method for Failure in Sewn Seams of Woven Fabrics<sup>2</sup>

D 3359 Test Methods for Measuring Adhesion by Tape Test<sup>3</sup>

D 5034 Test Method for Breaking Strength and Elongation of Textile Fabrics (Grab Test)<sup>4</sup>

F 966 Consumer Safety Specification for Full-Size and Non-Full-Size Baby Crib Corner Post Extensions<sup>5</sup>

<sup>1</sup> This specification is under the jurisdiction of ASTM Committee F-15 on Consumer Products and is the direct responsibility of Subcommittee F15.18 on Cribs, Toddler Beds, and Play Yards.

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<sup>2</sup> Annual Book of ASTM Standards, Vol 07.01.

<sup>3</sup> Annual Book of ASTM Standards, Vol 06.01.

<sup>4</sup> Annual Book of ASTM Standards, Vol 07.02.

<sup>5</sup> Annual Book of ASTM Standards, Vol 15.07.

## 2.2 Federal Regulations:<sup>6</sup>

- 16 CFR 1303 Ban of Lead-Containing Paint and Certain Consumer Products Bearing Lead-Containing Paint
- 16 CFR 1500 Hazardous Substance Act Regulations Including Sections:
- 16 CFR 1500.44 Method for Determining Extremely Flammable and Flammable Solids
- 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 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 *conspicuous, adj*—a label that is visible, when the play yard is in a manufacturer’s recommended use position, to a person standing near or at any one position around the play yard, but not necessarily visible from all positions.

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

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

3.1.4 *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.

3.1.5 *manufacturer’s recommended use position, n*—any position for use of the product that is presented as a normal, allowable, or acceptable configuration by the manufacturer in any descriptive or instructional literature. This literature specifically excludes positions that the manufacturer shows in a like manner 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, or 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 *mesh-fabric play yard, n*—a play yard constructed with a rigid frame assembly and a fabric or mesh assembly, or both, used to function as sides, ends, or floor, or a combination thereof.

3.1.8 *non-paper label, n*—any label material, such as plastic or metal, which either will not tear without the aid of tools, or tears leaving a sharply defined edge or labels made from fabric.

3.1.9 *occupant, n*—that individual who is in a product that

is set up in one of the manufacturer’s recommended use positions.

3.1.10 *paper label, n*—any label material except fabric which tears without the aid of tools and leaves a fibrous edge.

3.1.11 *permanent, adj*—(labels/warning attachments):

3.1.11.1 *Labels not attached by a seam.*

3.1.11.2 A non-paper label or decal shall be considered permanent if during an attempt to remove it manually without the aid of tools or solvents, it cannot be removed or such action damages the surface to that it is attached.

3.1.11.3 A paper label shall be considered permanent if during an attempt to remove it manually without the aid of tools or solvents, it cannot be removed, it tears upon removal or such action damages the surface to that it is attached.

3.1.11.4 *Labels attached by a seam.*

3.1.11.5 A label attached by a seam shall be considered permanent if it complies with the requirements of 7.8.2 and does not tear, yielding a separate part, during the test, and meets the assembly requirements of 7.8.1.

3.1.12 *rigid-sided play yard, n*—a play yard with sides/ends constructed of rigid materials like wood, plastic, or metal generally configured as a horizontal rail/vertical slat assembly.

3.1.13 *seam, n*—a means of joining fabric components, such as sewing, welding, heat sealing, or gluing.

3.1.14 *static load, n*—a vertically downward load applied by a dead weight or other means.

3.1.15 *structural failure, n*—damage to component(s) or assembly resulting in partial separation [greater than 0.040 in. (1.00 mm) over original configuration], or complete separation of the component(s) or assembly.

3.1.16 *warning statements*

3.1.16.1 *Discussion*—If warning statements are on a label, refer to 3.1.11.1 or 3.1.11.4.

3.1.16.2 Warning statements applied directly onto the surface of the play yard by hot stamping, heat transfer, printing, wood burning, etc., will be considered permanent if the letters in the area tested are still legible and attached after being subjected to the test prescribed in 10.12.

## 4. General Testing Requirements

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 test instructs differently.

4.2 The play yard 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 play yard to be tested shall be in a room with ambient temperature of 73 ± 9°F (23 ± 5°C) for at least one 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 The play yard shall comply with all requirements of this consumer safety specification before and after testing as specified in Section 10 of this consumer safety specification.

<sup>6</sup> Code of Federal Regulations, available from U.S. Government Printing Office, Washington, DC 20402.

5.2 *Regulations and Standards*—Play yards shall conform to regulations and documents referenced in Section 2 before and after all testing.

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

5.4 *Scissoring, Shearing, or Pinching:*

5.4.1 A play yard when in the manufacturer’s recommended use position shall be designed and constructed 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 exists when the edges of the rigid parts admit a probe that is greater than a 0.210-in. (5.30-mm) and less than a 0.375-in. (9.50-mm) diameter at any accessible point throughout the range of motion of such parts.

5.4.2 Play yards that allow the top rail to be in a lowered position when the play yard is erected, whether or not this is a recommended use position as shown in Fig. 1, shall be evaluated and shall be tested in accordance with 10.10.

5.5 *Latching and Locking Mechanisms:*

5.5.1 Any play yard that folds shall have a latching or locking device or other provision in the design that will prevent the play yard from accidentally folding when placed in the manufacturer’s recommended use position.

5.5.1.1 During and upon completion of all testing, the play yard shall remain in its manufacturer’s recommended use position.

5.5.1.2 If a play yard is designed with a latching or locking device, that device shall remain engaged and operative after testing.

5.5.1.3 Each single-action locking or latching device that is provided to prevent folding shall require a minimum force of 10 lbf (45 N) to activate the release mechanism when tested in accordance with 10.9.

5.5.1.4 Each double-action locking or latching device that is provided to prevent folding shall require two distinct and separate actions for release. There are no force requirements for double-action locking or latching devices.

5.6 *Top Rail Assembly with Central Hinge*—Play yard designs requiring latching or locking of a top rail(s) to prevent folding, which includes central hinge(s) and rail assembly that moves downward when folded, as shown in Fig. 2, excluding play yards as shown in Fig. 1, shall have a locking device that automatically engages when placed in a manufacturer’s recommended use position. No top rail shall give the appearance of being in the manufacturer’s recommended use position unless the locking device is fully engaged.

NOTE 1—No test procedure is necessary for 5.6.

5.7 *Openings:*

5.7.1 Any shaped holes, slots, or cracks that exist in the play yard in the manufacturer’s recommended use position and that are accessible to the toes or fingers of the occupant through or recessed, or both, into the surface of any rigid material that admits a 0.210-in. (5.30-mm) diameter rod, also shall admit a 0.375-in. (9.50-mm) diameter rod. Openings that have a minimum dimension between 0.210 in. (5.30 mm) and 0.375 in. (9.50 mm) shall be permissible, providing the depth is no greater than the minimum dimension of the opening.

5.7.2 Openings in the surface of the floor support made of rigid material shall be designed to prevent entrapment of fingers, toes, hands and feet if the occupant can readily move, lift, or fold the floor pad to expose the opening. Round openings shall comply with 5.7.1 and shall not exceed 1.25-in. (32-mm) diameter. For other shaped openings, the opening shall comply with 5.7.1 and any continuous portion of an opening that admits a 0.375-in. (9.50-mm) diameter rod must fit within a 1.25-in. (32-mm) diameter circle.

5.8 *Protective Components*—If the child can grasp between

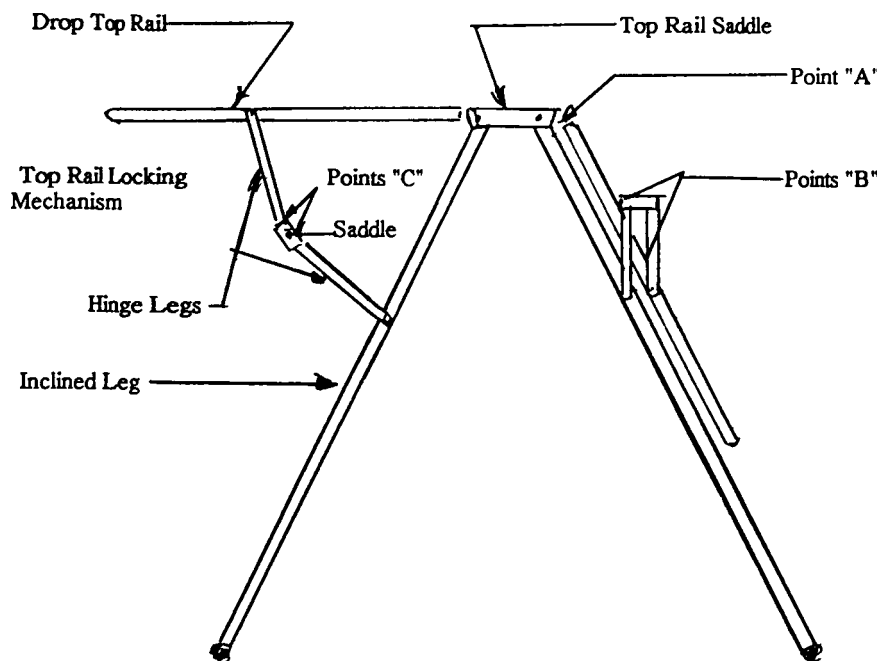


FIG. 1 Play Yard Frame Components

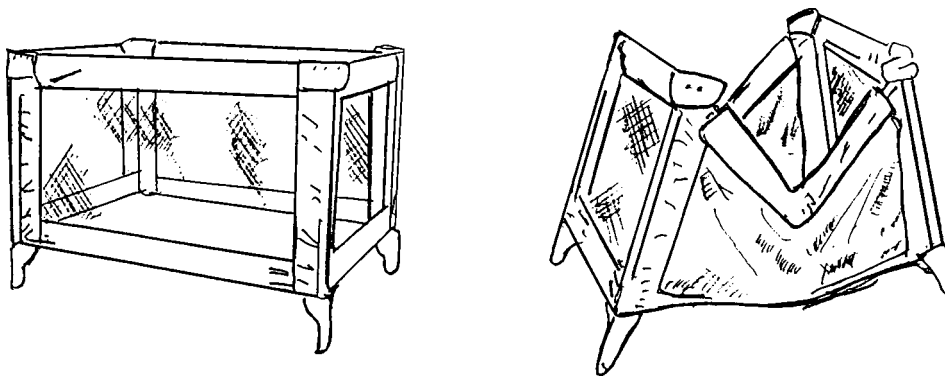


FIG. 2 Top Rail Assembly With Central Hinge(s)

the thumb and forefinger or teeth, components such as caps, sleeves, or plugs used for protection from sharp edges, points, or entrapment of fingers or toes, or if there is at least a 0.040-in. (1.00-mm) gap between the component and its adjacent parent component, such components shall not be removed when tested in accordance with 10.11.

5.9 Nonpaper Labels:

5.9.1 Nonpaper labels or decals, such as warning labels, brand name labels, decorative labels, or pinstriping, which may present a choking hazard if removed, must be permanent.

5.9.1.1 Nonpaper labels that may present a choking hazard are those, which upon removal, fit entirely within the small parts cylinder as defined in 16 CFR 1501. Nonpaper labels that tear during the test to remove them are considered labels that may pose a choking hazard.

NOTE 2—Paper labels are exempt from the small parts requirements of 16 CFR Part 1501 because paper cannot be meaningfully tested.

5.9.1.2 Nonpaper labels attached by a seam, except warning labels, that tear along a seam only and do not yield a part which fits entirely within the small parts cylinder, as defined in 16 CFR 1501, are not considered labels that pose a choking hazard, and thus, are not required to be permanent.

5.10 Cord Length—No cord having a free, stretched length in excess of 7.4 in. (188 mm), when tested in accordance with 10.17, shall be attached to a play yard. No cord intended or likely to be used to attach other products to the play yard shall be provided.

5.11 Coil Springs—Any exposed coil spring, which is accessible to the occupant, having or capable of generating a space between coils of 0.210 in. (5.50 mm) or greater during static load testing, shall be covered or otherwise designed to prevent injury from entrapment.

5.12 Stability—When subjected to test described in 10.16, a minimum of three perimeter support points of the product not in a straight line shall remain in contact with the inclined plane. Products with an adjustable mattress support shall be tested with the mattress in the lowest adjustable position.

5.13 Corner Post Extensions—All corner posts must meet the Specification F 966.

6. Performance Requirements for Rigid-Sided Play Yards

6.1 After all testing, the play yard shall comply with 16 CFR Part 1509.

6.2 Vertical Impact—These tests assist in evaluating the

structural integrity of the play yard assembly. Glue joints and other means of fastening are subjected to abusive loads and stresses.

6.2.1 Pad/Mattress Support—This test consists of dropping a mass repeatedly onto the pad or mattress provided with the play yard, in accordance with the test method described in 10.1. If a pad or mattress is not provided with the play yard, use the pad specified in 10.1.1.2. Upon completion of testing, components attached by glue, screws, or other fastening means shall not have separated by more than 0.040 in. (1.00 mm) over original configuration.

6.2.2 Side or End, or Both—This test consists of repeatedly impacting the bottom rail of a play yard side or end with a weight in accordance with the test method described in 10.2. Upon completion of testing, components attached by glue, screws, or other fastening means shall not have separated by more than 0.040 in. (1.00 mm) over their original configuration.

6.3 Pad/Mattress Support System—These tests assist in evaluating the integrity of the attachment of the pad/mattress support to the play yard.

6.3.1 A pad/mattress support, which is fixed with respect to the play yard frame, is tested in accordance with 10.3. Test failure occurs if the pad/mattress support system becomes detached from the frame at any point of attachment or if the force cannot be maintained.

6.3.2 A pad/mattress support, which is not fixed on opposite sides to the play yard frame, is tested in accordance with 10.3.3, that is, a hinged or a support created by a recessed area in which the pad/mattress support sits. Test failure occurs if (a) any portion of the support system becomes detached from the play yard at any point of attachment, or (b) if any free moving portion of the support system does not return to its intended use position once the force is removed.

6.4 Foldable Side or End Latch—This test consists of loading the latches intended to prevent folding of the sides/ends when in the manufacturer's use position, in accordance with the test method described in 10.4. The latching mechanism shall not disengage during testing and shall continue to function in the intended manner upon completion of the testing.

6.5 Plastic Teething Rail—This test consists of deforming the plastic teething rail under load to determine the security of the attachment. Failure occurs when the feeler gage, as defined



in 10.5.1.1, can freely enter into a gap created by the deflection or deformation, or both, of the plastic teething rail when tested in accordance with 10.5.

## 7. Performance Requirements for Mesh/Fabric Play Yards

**NOTE 3**—Mesh/fabric play yards that include a rigid side, end, or floor should be tested in accordance with Section 6 on that side, end, or floor.

**7.1 Height of Sides**—The height of the sides of the play yard shall be a minimum of 21 in. (531 mm) when measured vertically from the floor of the play yard, if a floor pad is provided, or 20 in. (508 mm) from the top of the uncompressed floor pad to the top of the side rail when the side rail is in its fully erected position.

**7.2 Side Deflection and Strength**—All tests in this section are to be performed sequentially.

**7.2.1** The top rail and supporting members of the play yard shall not have a permanent deflection that reduces the height to less than that specified in 7.1, when tested in accordance with 10.6.2.2.

**7.2.2** The side of the play yard shall not deflect under a force to a height less than 18 in. (460 mm) when measured vertically at the location where the force is applied when tested in accordance with 10.6.2.3.

**7.2.3** The top rail and locking mechanism of play yards having a top rail assembly with a central hinge (see Fig. 2) shall not break or disengage when tested in accordance with 10.6.2.4.

**7.3 Floor Strength**—The floor of the play yard shall withstand an application of a static load and a dynamic load without creating any hazardous condition as addressed in this specification when tested in accordance with 10.7.

**7.4 Mesh Openings**—Opening in the mesh shall be designed to prevent entrapment of fingers, toes, and snaring of buttons normally used on infant clothing. A mesh opening shall not accept the specified rod when tested in accordance with 10.8.

**7.5 Mesh Strength**—When tested in accordance with 10.14, no mesh shall break, rupture, or become separated from its supporting structure or attachments.

**7.6 Top Rail Covering Materials**—When unsupported or nonreinforced vinyls are used to cover any top rail or component, the thickness of the vinyl shall not be less than 0.011 in. (0.28 mm) when measured in accordance with 10.13.

### 7.7 Fabric Material Requirements:

**7.7.1 Fabric Strength** (see Note 4)—Fabric material used for sides, ends, or floor support, excluding mesh, shall have a breaking strength of at least 50 lbf (220 N) when tested in accordance with the grab test described in Test Method D 5034 in both the warp and fill directions. Fabric materials used for sides, ends, or floor support, excluding mesh, shall have a tear resistance of at least 2 lbf (9 N) when tested in accordance with Test Method D 1424 in both the warp and fill directions. (See Note 4.)

### 7.8 Mesh/Fabric Assembly Requirements (See Note 4):

**7.8.1 Sewn Assembly**—All stitching that is used in the sides, ends, or floor support and is accessible to the occupant, shall be lock-stitching or a chain-stitch where the key thread is not accessible to the occupant. The key thread is a thread at the end of the seam, which if pulled, will pull the stitching apart and

disassemble the sewn assembly.

**7.8.2 Seam Strength**—All seams used in the sides, ends, or floor support of the crib shall when tested in accordance with Test Method D 1683, Section 9, have a breaking strength of not less than 30 lbf (135 N). All labels or other attachments which can be grasped between the thumb and forefinger, and are secured by a seam, shall not separate from the product when subjected to a 15-lbf (67-N) pull force applied in any direction using a clamp with a 3/4-in. (19-mm) diameter clamping surface.

**NOTE 4**—Samples required in this section should be taken from a new product assembly and/or representative raw material.

**7.8.3 Mesh/Fabric Attachment Strength**—All locations where mesh/fabric or fabric assembly is fastened mechanically to rigid structural elements, for example, fastening of the mesh/fabric side to the perimeter of the hardboard floor, shall not disengage or deform under a load, such that the fabric can be disassembled when tested in accordance with 10.15.

**7.9 Floor Pad**—The filling material of the floor pad such as foam, fiber fill, etc. shall not exceed 1 in. (25 mm) in thickness. The total thickness of the floor pad including all fabric or vinyl layers, filling material and any structural members such as wood, hardboard, etc. shall not exceed 1 1/2 in. (37 mm). If a play yard is designed to use a floor pad, the floor pad must be provided by the manufacturer.

## 8. Labeling and Warnings

**8.1** Each play yard and its retail carton shall be marked clearly and legibly to indicate the following:

**8.1.1** Name and place of business (city, state, and mailing address, including zip code) of the manufacturer, importer, distributor, or seller.

**8.1.2** Model number, stock number, catalog number, item number, or other symbol expressed numerically, or otherwise, such that only articles of identical construction, composition, and dimensions shall bear identical markings. The manufacturer shall change model number whenever a significant structural or design modification is made that affects its conformance with this consumer safety specification.

**8.1.3** Code mark or other means that identifies the date (month and year as a minimum) of manufacture.

**8.2** Any upholstery label required by law shall not be used to meet the requirements of 8.1.

### 8.3 Warning Statements:

**8.3.1** Each play yard shall have warning statements. The warning statements shall be in contrasting color(s), permanent and applied, so they are visible in their entirety when in the manufacturer's use position or comply with 8.3.1.1. The word **⚠ WARNING** shall not be less than 0.2 in. (5 mm) high and the remainder of the text shall be letters not less than 0.1 in. (2.5 mm) high in sans serif type except as specified. Each statement location shall use the delineated signal word containing the safety alert symbol before the signal word.

**8.3.1.1** Those play yards with warnings in accordance with 8.3.2 that are not visible in the manufacturer's recommended use position must have a conspicuous warning giving their location, as follows:

△ WARNING  
SEE BOTTOM OF PANEL

(Note—If a play yard has an instruction sheet add the following: and INSTRUCTION SHEET FOR WARNINGS

8.3.2 The following warning statements shall be included exactly as stated below:

8.3.2.1

△ WARNING

Failure to follow these warnings and instructions could result in serious injury or death.

8.3.3 Additional warning statements shall address the following:

8.3.3.1

The play yard, including side rails, must be fully erected prior to use.

8.3.3.2 To play yards with latches to prevent lowering a dropside or prevent folding (as shown in Fig. 1), add the following statement to that in 8.3.3.1:

Make sure latches are secure.

8.3.3.3 For mesh and rigid sided play yards use only the pad/mattress that is provided and add the following warning statement:

**SUFFOCATION HAZARD:** To help prevent suffocation from entrapment use only the pad/mattress provided by the manufacturer. Never use additional mattress or padding.

8.3.3.4

Use only for a child who is unable to climb out of the play yard and is less than 35 in. (890 mm) tall and weighs less than 30 lbs (14 kg).

8.3.3.5

Never leave your child unattended.

8.3.3.6

Strings can cause strangulation. **DO NOT** place items with a string around a child's neck, such as hood strings, pacifier cords, etc. **DO NOT** suspend strings over the play yard or attach strings to toys.

8.3.3.7

**DO NOT** place the play yard near a window where cords from blinds or drapes can strangle a child.

8.3.3.8

**DO NOT** add padding or other objects inside the play yard that will permit your child to climb out.

8.4 Dropside Warning:

8.4.1 Mesh play yards that are designed with fold down side rails, as in Fig. 1 **MUST** display the following △ **WARNING** statement on either the inside of the top rail on opposite sides of the play yard or on two opposite saddle covers.

△ WARNING

NEVER LEAVE infant in Play Yard with SIDES DOWN infant may roll into space between pad and loose mesh side causing suffocation

8.4.1.1 In the warning statement, the words △ **WARNING**, **NEVER LEAVE**, and **SIDES DOWN**, shall be in sans serif boldface type, not less than 0.2 in. (5 mm) high, and the remainder of the text shall be in sans serif letters not less than 0.16 in. (4 mm) high.

9. Instructional Literature

9.1 Instructions provided with the play yard shall be easy to read and understand. Assembly, maintenance, cleaning, operating, folding instructions, and warnings must be included.

9.1.1 If a separate instruction sheet is used, it shall include the following statement: Read all instructions before assembly and use of play yard. Keep instructions for future use.

9.1.2 In the warning statements located in the instructional literature, the letters of the word “**WARNING**” shall not be less than 0.2 in. (5 mm) high and the remainder of the text shall not be less than 0.1 in. (2.5 mm). Refer to 8.3 for “**WARNING**” statement requirements.

9.2 The instructional literature shall contain the applicable warning statements from Section 8.

10. Test Methods

10.1 Pad/Mattress Support Impact Test for Rigid-Sided Play Yards:

10.1.1 Equipment:

10.1.1.1 *Weight*—A circular device with a contact area of 1 ft<sup>2</sup> (930 cm<sup>2</sup>), 13.5-in. (340-mm) diameter, with a 0.12-in. (3-mm) radius to ease the edges between the circular contact surface and the vertical cylindrical surface. The total impactor shall be 45 lb (20 kg). The impactor shall pivot freely.

10.1.1.2 *Pad*—A 1-in. (25-mm) thick open cell polyurethane foam pad having a density of 1 lb/ft<sup>3</sup> (16 kg/m<sup>3</sup>) covered with a 5 to 15 gage vinyl material.

NOTE 5—Use with play yards without pads.

10.1.1.3 *Typical Test Frame*, (see Fig. 3).

10.1.2 Test Procedure:

10.1.2.1 If play yard has casters, remove them.

10.1.2.2 The play yard shall be prevented from sliding in a manner that does not prevent changes of angle that may take place in the play yard structure (see Fig. 4).

10.1.2.3 All testing shall be conducted with the pad/mattress support in the lowest position.

10.1.2.4 Allow the impactor specified in 10.1.1.1 to pivot freely and free fall 6 in. (150 mm) onto the upper surface of the

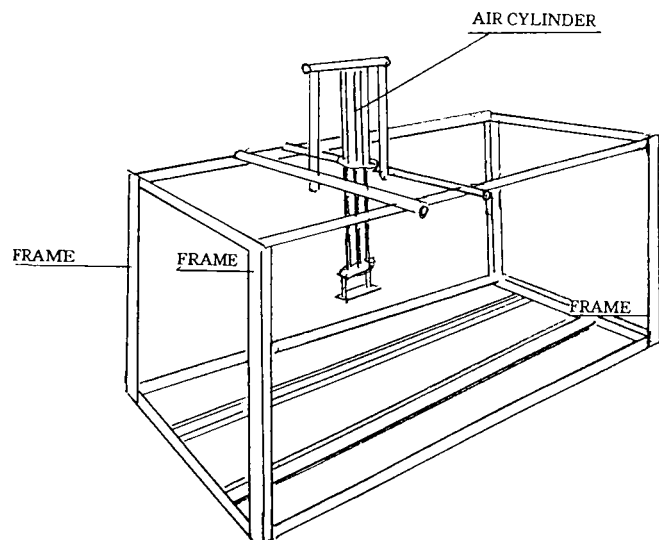


FIG. 3 Typical Test Frame