



U.S. CONSUMER PRODUCT SAFETY COMMISSION
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TRANSMITTED VIA EMAIL

Mr. Keith A. Schneider
Subcommittee Co-Chairman for ASTM F15.19, Infant Bedding
c/o ASTM International
100 Barr Harbor Drive
P.O. Box C700
West Conshohocken, PA 19428-2959

Dear Mr. Schneider:

The fiscal year 2017 (FY17) Operating Plan of the U.S. Consumer Product Safety Commission (CPSC) directed CPSC staff to prepare a notice of proposed rulemaking (NPR) briefing package in FY18 that recommends a proposed consumer product safety standard for padded crib bumpers under section 104 of the Consumer Product Safety Improvement Act of 2008 (CPSIA).¹ The Commission reaffirmed this in the FY18 Operating Plan.² The FY17 Operating Plan stated that this standard must be more stringent than the then-current ASTM voluntary standard, F1917 – 12, and further reduce the risk of injury associated with these products. The Operating Plan also identified several minimum requirements for such a standard, including:

- a performance requirement to show that a crib bumper is firm enough not to conform to the face of an infant;
- a performance requirement to demonstrate that a crib bumper matches or exceeds the airflow characteristics of mesh or mesh-like materials; and
- warnings and instructions on a crib bumper that explain the types of crib on which the product can and cannot be installed, clear advice about how to install the product, and the age at which a child should stop using the product.

On December 6, 2016, CPSC staff submitted a letter to ASTM International (ASTM) requesting that the ASTM F15.19 Subcommittee on Infant Bedding form task groups to initiate activities to

¹ See <https://www.cpsc.gov/s3fs-public/CPSCFY2017OpPlan.pdf>.

² See https://www.cpsc.gov/s3fs-public/FY_2018_Operating_Plan_August302017.pdf.

The views expressed in this letter are those of CPSC staff and have not been reviewed or approved by, and may not necessarily reflect the views of, the Commission.

update ASTM F1917, *Standard Consumer Safety Performance Specification for Infant Bedding and Related Accessories*, with more stringent requirements that will address the issues above and will further reduce the risk of injury associated with crib bumpers. Specifically, staff recommended the formation of three task groups to: (1) develop firmness requirements, (2) develop airflow requirements, and (3) improve warning and instructional requirements for crib bumpers.

Staff appreciates that the F15.19 subcommittee established these three task groups, but remains concerned that it does not appear that sufficient progress has been made to bring balloted items to the subcommittee, despite the efforts of the task group members. The firmness task group has made progress developing a general recommendation for a performance requirement based on AS/NZS 8811.1:2013, *Methods of Testing Infant Products: Part 1: Sleep Surfaces—Test for Firmness*; however, ASTM requirements and an associated ballot that would accomplish this goal still have not been drafted. The warnings and instructions task group has not met since the task group's formation, and although a draft ballot was discussed during the June 2017 subcommittee meeting, no ballot has been issued. CPSC staff does, however, recognize the challenges associated with developing an airflow requirement, and understands that the airflow task group has concluded that the available data do not support such a requirement at this time.

In addition, in October 2017, CPSC staff made a presentation to the subcommittee that outlined its proposed revisions to F1917, based on a review of the standard. During the meeting, the subcommittee seemed generally supportive of the proposed revisions. However, CPSC staff is not aware of any subcommittee activities addressing the issues staff raised.

To advance the dialog and possible balloting of proposed revisions to the standard, please find attached to this letter a series of tables that reflect CPSC staff's specific recommended revisions to ASTM F1917. CPSC staff appreciates your prompt attention to this matter, and looks forward to working with the ASTM F15.19 Subcommittee on Infant Bedding to develop ballots to address these recommendations for improved voluntary standard requirements for crib bumpers. Please feel free to contact me if you have any questions or need additional information.

Sincerely,



Timothy P. Smith
Project Manager,
CPSC Crib Bumpers Rulemaking Project

CC: Len Morrissey, ASTM F15 Staff Manager
Donald Huber, Infant Bedding Warnings and Instructions Task Group Chair
Seabren Reeves, Infant Bedding Airflow Task Group Chair
Richard White, Infant Bedding Firmness Task Group Chair
Patricia L. Edwards, CPSC Voluntary Standards Coordinator

TABLES COMPARING ASTM F1917 – 12 TO STAFF’S PROPOSED REVISIONS:³

3. Terminology

ASTM F1917 – 12	Staff’s Proposed Revisions	Rationale
<p>3.1.1 <i>attachment means, n</i>—flexible ribbons, strings, hook and loop straps, ties, and similar devices attached to a bumper for the purpose of attaching to a crib.</p>	<p>3.1.1 <i>attachment means, n</i>—flexible ribbons, strings, hook and loop straps, ties, and similar devices attached to a <u>crib</u> bumper for the purpose of attaching to a crib.</p>	<p>Revised existing definitions to account for the new “crib bumper” definition, below.</p>
<p>3.1.4 <i>infant bedding and related accessories, n</i>— includes the following items intended for use in a nursery: fitted sheets, blankets, dust ruffles, covers and drapes for canopies, pillows, mattress covers, diaper stackers, fabric wall hangings, bumper guards, headboard bumper guards, and comforters.</p>	<p>3.1.4 <i>infant bedding and related accessories, n</i>— includes the following items intended for use in a nursery: fitted sheets, blankets, dust ruffles, covers and drapes for canopies, pillows, mattress covers, diaper stackers, fabric wall hangings, <u>crib bumpers</u>, guards, headboard bumper guards, and comforters.</p>	<p>Revised existing definitions to account for the new “crib bumper” definition, below.</p>
<p>(No requirement)</p>	<p><u>3.1.X <i>conspicuous, adj</i>— visible, when the product is in all manufacturer’s recommended use positions, to a person standing near the product at any one position around the product, but not necessarily visible from all positions.</u></p> <p><u>3.1.X <i>crib bumper, n</i>—any product intended to be attached to the side of a crib to reduce or eliminate an infant’s access to the crib panels or to the openings in crib panels. Such products might be sold as a single continuous piece or as multiple independent panels, and are commonly referred to as crib bumpers, bumper pads, bumper guards, headboard panels, or crib liners.</u></p>	<p>New definitions added to clarify requirements and to improve consistency throughout the standard. The “conspicuous” definition was adapted from other ASTM standards, such as ASTM F404 – 18, <i>Standard Consumer Safety Specification for High Chairs</i>, and ASTM F2613 – 17a, <i>Standard Consumer Safety Specification for Children’s Chairs and Stools</i>.</p>

³ Recommended additions are underlined, and recommended deletions are single struck-through.

5. General Requirements

ASTM F1917 – 12	Staff's Proposed Revisions	Rationale
<p>5.1 Attachment means on bumper guards and headboard bumper guards shall not exceed 9.0 in. (230 mm) when measured in accordance with 7.1.</p>	<p>5.1 Attachment means on <u>crib bumpers, guards and headboard bumper guards</u> shall not exceed 9.0 in. (230 mm) <u>both before and after 7.4.1 testing</u> when measured in accordance with 7.1.</p>	<p>Revised attachment means requirement based on new definition for crib bumpers. Also, the length requirement should apply after testing as well, because otherwise the partial detachment of a tie, which is permitted by the standard, could cause the tie to exceed the 9-inch limit.</p>
<p>5.2 Decorative components as defined in 3.1.2 shall not exceed 7 in. (180 mm) when measured in accordance with 7.1. If any decorative components can tangle to form a loop, then the perimeter of the loop shall not exceed 14 in. (360 mm) when measured in accordance with 7.1.</p>	<p>5.2 Decorative components as defined in 3.1.2 shall not exceed 7 in. (180 mm) when measured in accordance with 7.1. If any decorative components can tangle to form a loop, then the perimeter of the loop shall not exceed 14 in. (360 mm) when measured <u>tested</u> in accordance with 7.1. <u>These requirements shall apply both before and after 7.4.3 testing.</u></p>	<p>Clarified the requirement to address the fact that section 7.1 measures the extended line length, not a loop perimeter. Also required the requirement to be met both before and after testing.</p>
<p>5.4 Bumper guards shall be capable of being secured at or near all corners and at the midpoints of the long sides of the crib. Bumper guards intended for circular cribs shall be capable of being secured at intervals not exceeding 26 in. (660 mm).</p>	<p>5.4 <u>Crib bumpers shall be capable of being secured at both ends. Crib bumpers intended for a short side of a crib, or segments of a crib bumper intended for a short side of a crib, Bumper guards shall be capable of being secured at or near all the corners posts or at the slats immediately adjacent to the corner posts of the intended crib side, and at the midpoints of the short long sides of the crib. Crib bumpers intended for a long side of a crib, or segments of a crib bumper intended for a long side of a crib, shall be capable of being secured at the corner posts or at the slats immediately adjacent to the corner posts of the intended crib side, and at 1/4, 1/2, and 3/4 of the length of the long side of the crib. Bumper guards intended for circular cribs shall be capable of being secured at intervals not exceeding 1326 in. (330660 mm). <u>All crib bumpers must have sufficient attachment means to keep both its top and bottom edges flush against the interior side of the crib.</u></u></p>	<p>Revised to eliminate ambiguity about where the bumper must be capable of being secured, and to require that both the tops and bottoms of bumpers remain flush against the crib sides. Shortened the distances at which the bumper must be secured to reduce the likelihood of sagging after installation. Also, added a requirement for bumpers to be capable of being secured at each end to avoid loose or overlapping ends of the bumper. A new section 8.4 includes a requirement for bumpers to be marked to indicate which portions are intended for the long or short sides of a crib.</p>
<p>(No requirement)</p>	<p><u>5.5 Labeling—Warning labels (whether paper or non-paper) shall be permanent when tested in accordance with 7.5.</u></p> <p><u>5.5.1 Warning statements applied directly onto the surface of the product by hot stamping, heat transfer, printing, wood burning, and so forth shall be permanent when tested in accordance with 7.6.</u></p> <p><u>5.5.2 Non-paper labels shall not liberate small parts when tested in accordance with 7.6.</u></p> <p><u>5.5.3 Warning labels that are attached to the fabric with seams shall remain in contact with the fabric around the entire perimeter of the label, when the product is in all manufacturer-recommended use positions.</u></p>	<p>Added missing permanence requirements for warnings that are consistent with analogous requirements in other juvenile products standards. The additional section 5.5.3 requirement is based on a requirement that was added to the final rule for sling carriers to avoid free-hanging labels.</p>

6. Performance Requirements

ASTM F1917 – 12	Staff’s Proposed Revisions	Rationale
<p>6.2 <i>Maximum Bumper Thickness</i>—For crib bumpers manufactured of fabric and filled with a natural or manmade fibrous material, each bumper section shall slide through the bumper thickness test fixture (see Fig. 1) over its entire length when tested in accordance with 7.3. The bumper shall be tested in its pre-washed state and also after three wash/dry cycles performed according to the manufacturer’s care instructions.</p>	<p>6.2 <i>Maximum Crib Bumper Thickness</i>—For <u>all</u> crib bumpers manufactured of fabric and filled with a natural or manmade fibrous material, each bumper section shall slide through the bumper thickness test fixture (see Fig. 1) over its entire length <u>at a rate no less than 0.5 inch per second</u> when tested in accordance with 7.3. The bumper shall be tested in its pre-washed state and also after three wash/dry cycles performed according to the manufacturer’s care instructions.</p>	<p>Revised to require that all bumpers meet the thickness requirement, regardless of filling material, and to add a rate at which bumpers must pass through to more clearly delineate a pass from a fail. The rate was selected to avoid bumpers that stop from restarting due to external influences, such as vibration or how the tester feeds the bumper into the fixture. This rate seems reasonable based on how very quickly most bumpers slide through the fixture. Some thick bumpers technically will continue to pass through the fixture, just at an extremely slow rate.</p>
<p>Note: Test fixture shall be fabricated from aluminum and have a smooth finish. FIG. 1 Bumper Thickness Test Fixture</p>	<p>Note: Test fixture shall be fabricated from aluminum and have a smooth finish. <u>The test fixture slot and fillet finish shall be 1.6 Ra.</u> FIG. 1 Bumper Thickness Test Fixture</p>	<p>Added a finish requirement, because of its possible effect on how quickly a bumper can slide through the test fixture and the potential for variation among test labs and fixtures. Ra, or roughness average, is a mean measure of surface roughness left by cutting tools, in micrometers. A 1.6 Ra surface finish is approximately the finish of the CPSC test fixture, is a common “smooth” specification, and is practical to achieve. In addition, at a very slow speed of 0.5 in/sec (see above), friction is critical to motion. For comparison, cotton fabric is about 20 Ra.</p>

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<p>6.3 <i>Bumper Pad Tie Strength</i>—Following the testing specified in 7.4, a bumper pad tie shall not fully detach from the bumper pad. Partial detachment or tearing is allowed.</p>	<p>6.3 <i>Strength of Crib Bumper Attachments and Seams</i></p> <p><u>6.3.1 <i>Bumper Pad Tie Strength Attachment Means</i>—Following the testing specified in 7.4.1, a bumper pad tie the attachment means for a crib bumper shall not fully detach from the crib bumper pad. Partial detachment or tearing is allowed.</u></p> <p><u>6.3.2 <i>Seams</i>—Following the testing specified in 7.4.2, no seam shall have an opening that allows a 0.22-inch diameter steel rod to enter.</u></p> <p><u>6.3.3 <i>Decorative Components</i>—Following the testing specified in 7.4.3 the decorative component shall not fully detach from the crib bumper. Partial detachment or tearing is allowed.</u></p> <p><u>6.X <i>Crib Bumper Firmness</i>—For crib bumpers with an installed thickness of 0.59 in. (15 mm) or greater, no part of the bumper shall contact the feeler arm of the firmness test fixture (see Fig. X), when tested in accordance with 7.7. The bumper shall be tested in its pre-washed state and also after three wash/dry cycles performed according to the manufacturer's care instructions.</u></p>	<p>Revised to clarify that the strength requirements apply to all attachment means, not just bumper ties, and to add strength requirements for seams and decorative components. The seam strength requirement includes a criterion of 0.22 inches, based on the finger entrapment probe that is in many children's product tests. Also added a new firmness requirement for crib bumpers, based on the Firmness task group recommendations. The requirement to only test bumpers at least 0.59 in. (15 mm) thick is based on the thickness of the bottom disk of the test device, which is the same dimension. A figure of the test device will need to be added.</p>
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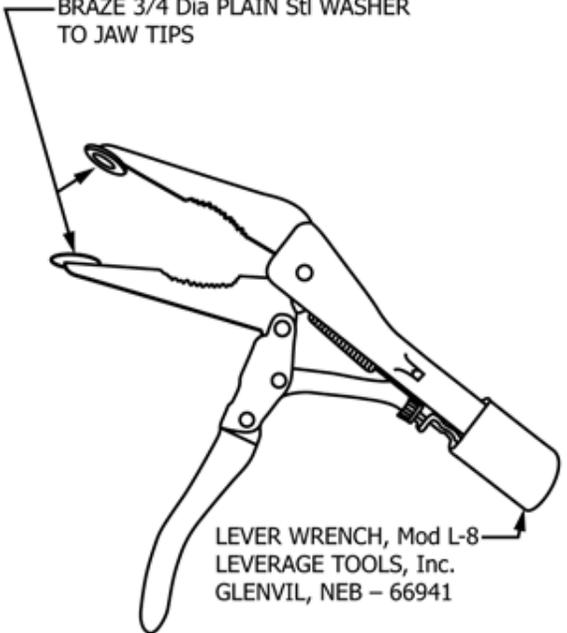
7. Test Methods

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<p>7.3 <i>Bumper Thickness Test</i>—Align the bumper thickness test fixture so that the surface of the fixture with the opening is horizontal. Insert a bumper end into the opening so that the bumper end protrudes just beyond the lower surface of the test fixture and attach a 5-lb static weight to the midpoint of the protruding bumper end. Keeping the bumper positioned vertically, allow the weight to slowly draw the bumper through the opening.</p> <p>NOTE 1—If bumper ties or other localized means provided to secure the bumper to the crib interfere with the bumper sliding through the bumper thickness test fixture, ease the ties or fasteners through the fixture and then continue the test.</p> <p>7.4 <i>Bumper Pad Tie Attachment Strength</i>—Apply a tensile force of 20 lb on the bumper pad tie(s) in a perpendicular direction away from the attachment point of the ties to the bumper pad. The force shall be applied evenly within a period of 5 s, and maintained for additional 10 s. The loading device shall be a self-indicating force gauge or other appropriate means having an accuracy of 60.5 lb (62 N).</p> <p>7.4.1 Bumper pad ties that share a common attachment shall be tested together, as if one tie.</p> <p>NOTE 2—There is no single clamp or attachment means specified for the bumper pad tie attachment strength test. Any suitable means may be used to apply the force specified in 7.4.</p>	<p>7.3 <i>Crib Bumper Thickness Test</i>—Align the bumper thickness test fixture so that the surface of the fixture with the opening is horizontal. Insert a bumper end into the opening so that the bumper end protrudes just beyond the lower surface of the test fixture and attach a 5-lb static weight to the midpoint of the protruding bumper end. Keeping the bumper positioned vertically, allow the weight to slowly draw the bumper through the opening.</p> <p>NOTE 1—If bumper ties <u>the attachment means</u> or other localized means provided to secure the bumper to the crib interfere with the bumper sliding through the bumper thickness test fixture, ease the ties or fasteners <u>other attachment means</u> through the fixture and then continue the test.</p> <p>7.4 <i>Crib Bumper Strength Tests</i>—<u>Tensile tests of attachment means, decorative components, and seams shall be conducted using clamps as described in 7.4.1, 7.4.2, 7.4.3. The force in each test shall be applied evenly within a period of 5 s, and maintained for additional 10 s. The loading device shall be a self-indicating gauge or other appropriate means having an accuracy of +/-0.5 lb (+/-2 N).</u></p> <p><u>7.4.1 Bumper Pad Tie Attachment Means Strength</u>—Apply a tensile force of 20 lb on the bumper-pad tie(s) <u>attachment means by clamping the free end</u> in a perpendicular direction away from the attachment point of the ties to the bumper pad. The force shall be applied evenly within a period of 5 s, and maintained for additional 10 s. The loading device shall be a self-indicating force gauge or other appropriate means having an accuracy of 60.5 lb (62 N).</p> <p>7.4.1.1 Bumper pad ties <u>Attachment means</u> that share a common attachment <u>point</u> shall be tested together, as if one tie <u>attachment means</u>.</p> <p>NOTE 2—There is no single clamp or <u>method of attachment means</u> specified for the crib bumper-pad tie attachment <u>means</u> strength test. Any suitable means may be used to apply the force specified in 7.4.1.</p>	<p>Added new test methods for the various strength requirements added to section 6. The attachment means strength test was also revised to test the strength of a tie filament along its length.</p>
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<p>(No requirement)</p>	<p><u>7.4.2 Seams Strength</u>—Apply a tensile force of 20 lb in a <u>direction most likely to pull the seam apart.</u> <u>The clamps used to grip the material on either side of the seam to be tested shall have jaws to which are attached 3/4-in. (19-mm) diameter washers (see Fig. XX).</u> <u>The clamps shall be attached to the cover material of a completely assembled crib liner in a manner such that the outside diameter of the 3/4-in. (19-mm) washers at a point nearest the seam shall be close to, but no closer than 1/2 in. (13 mm) from the edge of the seam stitching thread.</u></p> <p><u>7.4.3 Decorative Components, Attachment Strength</u>—Apply a tensile force of 20 lb on the decorative component in a <u>perpendicular direction away from the attachment point of the decorative component to the crib liner.</u> <u>With the crib liner held in a convenient position, an appropriate clamp shall be attached to the decorative component. The clamp shall be applied in a manner that will not affect the structural integrity of the attachment between the decorative component and the crib bumper.</u></p>	<p>Continuation of Crib Bumper Strength test methods.</p>
<p>(No requirement)</p>	 <p>FIG. XX Seam Clamp</p>	<p>Added figure showing seam clamp referenced in 7.4.2. This figure is from ASTM F963.</p>

<p>(No requirement)</p>	<p><u>7.5 Permanency of Labels and Warnings:</u></p> <p><u>7.5.1 A paper label (excluding labels attached by a seam) shall be considered permanent if, during an attempt to remove it without the aid of tools or solvents, it cannot be removed, it tears into pieces upon removal, or such action damages the surface to which it is attached.</u></p> <p><u>7.5.2 A non-paper label (excluding labels attached by a seam) shall be considered permanent if, during an attempt to remove it without the aid of tools or solvents, it cannot be removed or such action damages the surface to which it is attached.</u></p> <p><u>7.5.3 A warning label attached by a seam shall be considered permanent if it does not detach when subjected to a 15 lbf (67 N) pull force applied in any direction most likely to cause failure using a 0.75 in. (19 mm) diameter clamp surface. Gradually apply the force over 5 s and maintain for an additional 10 s.</u></p> <p><u>7.6 Adhesion Test for Warnings Applied Directly onto the Surface of the Product:</u></p> <p><u>7.6.1 Apply the tape test defined in Test Methods D3359, Test Method B—Cross-Cut Tape Test of Test Methods, eliminating parallel cuts.</u></p> <p><u>7.6.2 Perform this test once in each different location where warnings are applied.</u></p> <p><u>7.6.3 The warning statements will be considered permanent if the printing in the area tested is still legible and attached after being subjected to this test.</u></p> <p><u>7.6.4 A non-paper label, during an attempt to remove it without the aid of tools or solvents, shall not fit entirely within the small parts cylinder defined in 16 CFR 1501 if it can be removed.</u></p>	<p>Added missing warning permanence test methods that are consistent with analogous requirements in other ASTM juvenile products standards.</p>
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<p>(No requirement)</p>	<p><u>7.7 Crib Bumper Firmness Test—Select one side of the crib bumper. All marks described in this section shall be made at mid-bumper height. For each crib bumper intended for a short side of a crib, or segments of a crib bumper intended for a short side of a crib, mark two points along the bumper length: one at 1/3 of the total length, and one at 2/3 of the total length. For each crib bumper intended for a long side of a crib, or segments of a crib bumper intended for a long side of a crib, mark three points along the bumper length: 1/4, 1/2, and 3/4 of the total length. There will be 10 marks in total for a single continuous bumper intended to cover all four sides of a standard full-size rectangular crib. For each crib bumper intended for a circular crib, divide the total bumper length into 10 equal segments and mark the centroid of each segment. For crib bumpers no wider than 8 inches (203 mm), with the long axis intended to be installed vertically on the crib side, mark the centroid of the bumper. Place the center of the firmness test fixture (Figure X) on each mark with the feeler arm oriented in a way that is most likely to contact the bumper surface when the fixture is set down, such as over a plush construction. The firmness test fixture may be rotated such that the feeler arm is in any orientation that is completely over the crib bumper. Crib bumpers shall be conditioned for 48 hours prior to testing in an environment of 23 +/- 2 Celsius and a relative humidity of 50 +/- 5%. The crib bumper shall be fully assembled and dry prior to testing.</u></p>	<p>Added crib bumper firmness test methods, largely based on AS/NZS 8811.1 and the Firmness task group recommendations. Also, added specific test requirements for vertical bumpers and bumpers intended for circular cribs. A new section 8.4 includes a requirement for bumpers to be marked to indicate which portions are intended for the long or short sides of a crib. The test methods continue on the next page, with the test equipment.</p>
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<p>(No requirement)</p>	<p><u>7.7.1 Test Equipment – The Crib Bumper Firmness Testing Apparatus of Figure X shall be constructed with the following components:</u></p> <p><u>7.7.1.1 A Rigid Disk with a diameter of 203mm, thickness of 15mm with a bottom radius of 1mm.</u></p> <p><u>7.7.1.2 A Feeler Arm of high speed steel comprising a flat bar, 12mm wide, 0.02 to 0.03 in. thick, with square-cut ends that is positioned over a radial axis of the Rigid Disk and attached to the Rigid Disk such that the Feeler Arm overhangs the edge of the Rigid Disk by 40mm.</u></p> <p><u>7.7.1.3 A Level Indicator attached to the Rigid Disk near the Feeler Arm, without touching, and such that it indicates level with minimum accuracy of 0.14 in/ft parallel to the feeler arm and does not overhang the edge of the Rigid Disk in a way that interferes with testing.</u></p> <p><u>7.7.1.4 A Vertical Column with Handle and Collar attached to the center of the Rigid Disk.</u></p> <p><u>7.7.1.5 Total mass of the Apparatus shall be 5,200 grams including all components and fasteners.</u></p> <p><u>7.7.1.6 Mass of the Rigid Disk shall be not less than 70% of the total mass.</u></p> <p><u>7.7.1.7 Vertical height of assembled apparatus shall not exceed 8 in and the height of the collar shall not exceed 2 in to minimize the bias to the Rigid Disk.</u></p>	<p>Continuation of Crib Bumper Firmness test methods section. The test methods continue on the next page, with the specific test procedure.</p>
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<p>(No requirement)</p>	<p><u>7.7.2 Test Procedure</u></p> <p><u>7.7.2.1 Shake the crib bumper to aerate and distribute any filling materials evenly if the next placement is within 18 inches of, or for vertical bumpers if any affected segments have been contacted, or 5 minutes have elapsed since the previous placement. Allow the crib bumper to settle for 5 minutes.</u></p> <p><u>7.7.2.2 Place the side to test face up on a horizontal, flat, rigid surface for testing. The crib bumper may be secured to the horizontal surface using the attachment means in a manner that approximates securing the crib bumper to crib rails. For vertically installed crib bumpers, place segments down with bottom ends aligned and at a parallel spacing of 2-3/8 inch plus one bumper width as intended in a crib installation.</u></p> <p><u>7.7.2.3 Of the placements located, test those that are not affected by previous tests as described in 7.7.2.1 to minimize effects from adjacent placements.</u></p> <p><u>7.7.2.4 Test each placement in 7.7.2.3 by lowering the firmness test fixture with the bottom disk horizontal until the fixture is supported by the crib bumper. Gently adjust the orientation of the base manually if needed until it is horizontal while resting. Record any contact with the feeler gauge at each placement.</u></p> <p><u>7.7.2.5 Repeat firmness testing 7.7.2.1 to 7.7.2.4 until all remaining located placements have been tested. Repeat as needed.</u></p> <p><u>7.7.2.6 Repeat firmness testing on the other side of the bumper. Testing the other side is not required for crib bumpers that cannot be reasonably installed on the other side.</u></p>	<p>Continuation of Crib Bumper Firmness test methods section.</p>
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8. Product/Package Marking Requirements

ASTM F1917 – 12	Staff's Proposed Revisions	Rationale
<p>8. Product/Package Marking</p> <p>8.1 Each product shall have a permanent conspicuous label that identifies the name and address (city, state, and zip code) of the manufacturer, distributor, or seller, or a label that identifies the Registered Identification Number (RN) or Wool Products Labeling Act Number (WPL).¹</p>	<p>8. Product/Package Marking and Labeling</p> <p>8.1 Each product shall have a permanent conspicuous label that identifies the name and address (city, state, and zip code) of the manufacturer, distributor, or seller, or a label that identifies the Registered Identification Number (RN) or Wool Products Labeling Act Number (WPL).¹</p> <p><u>8.1 Each product and its retail package shall be marked or labeled clearly and legibly to indicate the following:</u></p> <p><u>8.1.1 The name, place of business (city, state, and mailing address, including zip code), and telephone number of the manufacturer, distributor, or seller.</u></p> <p><u>8.1.2 A code mark or other means that identifies the date (month and year as a minimum) of manufacture.</u></p> <p><u>8.2 The marking and labeling on the product shall be permanent.</u></p> <p><u>8.3 Any upholstery labeling required by law shall not be used to meet the requirements of this section.</u></p> <p><u>8.4 Crib bumpers shall be marked or labeled clearly and legibly to identify which segments of the bumper are intended for the short and long sides of the crib, unless the bumper is intended for a circular crib.</u></p>	<p>Revised to be consistent with the approved language of the Ad Hoc Language Task Group, as of October 24, 2017 (Revision C). Also, added a requirement for crib bumpers to be marked to indicate which portions are intended for the short and long sides of a crib, to avoid confusion about how to install the bumper.</p>

8.2 *Product Warning Labels*—A permanent conspicuous label(s) shall be on each infant bedding and related accessory as specified in this section. The label(s) shall be in the ANSI format, which would include a delineated signal word panel containing the safety alert symbol before the signal word and a contrasting background. The label(s) shall begin with the word “WARNING,” the letters of which shall not be less than 0.2 in. (5 mm) high. The remaining text shall be in letters whose upper case shall be not less than 0.1 in. (2.5 mm) high.

~~8.2 *Product Warning Labels*—A permanent conspicuous label(s) shall be on each infant bedding and related accessory as specified in this section. The label(s) shall be in the ANSI format, which would include a delineated signal word panel containing the safety alert symbol before the signal word and a contrasting background. The label(s) shall begin with the word “WARNING,” the letters of which shall not be less than 0.2 in. (5 mm) high. The remaining text shall be in letters whose upper case shall be not less than 0.1 in. (2.5 mm) high.~~

8.5 *Warning Design for Product:*

8.5.1 The warnings shall be easy to read and understand and be in the English language at a minimum.

8.5.2 Any marking or labeling provided in addition to those required by this section shall not contradict or confuse the meaning of the required information, or be otherwise misleading to the consumer.

8.5.3 The warning statements shall be conspicuous and permanent.

8.5.4 The warnings shall conform to ANSI Z535.4–2011, American National Standard for Product Safety Signs and Labels, sections 6.1–6.4, 7.2–7.6.3, and 8.1, with the following changes.

8.5.4.1 In sections 6.2.2, 7.3, 7.5, and 8.1.2, replace “should” with “shall.”

8.5.4.2 In section 7.6.3, replace “should (when feasible)” with “shall.”

8.5.4.3 Strike the word “safety” when used immediately before a color (for example, replace “safety white” with “white”).

8.5.5 The Safety Alert Symbol and the signal word “WARNING” shall be at least 0.2 in. (5 mm) high. The remainder of the text shall be in characters whose uppercase shall be at least 0.1 in. (2.5 mm) high.

NOTE 3—For improved warning readability, typefaces with large height-to-width ratios, which are commonly identified as “condensed,” “compressed,” “narrow,” or similar should be avoided.

8.5.6 *Message Panel Text Layout:*

8.5.6.1 The text shall be left aligned, ragged right for all but one-line text messages, which can be left aligned or centered.

NOTE 4—Left aligned means that the text is aligned along the left margin, and, in the case of multiple columns of text, along the left side of each individual column. Please see Fig. X1.1 in Appendix X1 for examples of left aligned text.

8.5.6.2 The text in each column should be arranged in list or outline format, with precautionary (hazard avoidance) statements preceded by bullet points. Multiple precautionary statements shall be separated by bullet points if paragraph formatting is used.

8.5.7 An example in the format described in this section is shown in Fig. 2.

Revised to be consistent with the approved language of the Ad Hoc Language Task Group, as of October 24, 2017 (Revision C).

8.2.1 *Crib Headboard/Bumper Set or Bumper*—For all headboard/bumper sets or bumpers sold as multiple panels and that can be used separately, all separate panels shall contain the warning label in this section. The warning label(s) for a headboard/bumper set or bumper shall read as follows:

▲ WARNING

To reduce the risk of suffocation, keep top of bumper up and in position. DO NOT allow bumper to sag down or in toward the sleeping surface. DO NOT use bumper if sagging cannot be corrected.

To prevent entanglement or strangulation, position ties to outside of crib and be sure they are secure.

Remove bumper when child can sit up unaided or can pull to a standing position.

~~8.2.1 *Crib Headboard/Bumper Set or Bumper*—For all headboard/bumper sets or bumpers sold as multiple panels and that can be used separately, all separate panels shall contain the warning label in this section. The warning label(s) for a headboard/bumper set or bumper shall read as follows:~~

▲ WARNING

~~To reduce the risk of suffocation, keep top of bumper up and in position. DO NOT allow bumper to sag down or in toward the sleeping surface. DO NOT use bumper if sagging cannot be corrected.~~

~~To prevent entanglement or strangulation, position ties to outside of crib and be sure they are secure.~~

~~Remove bumper when child can sit up unaided or can pull to a standing position.~~

8.6 *Warning Statements for Crib Bumpers*—Each crib bumper, or each crib bumper panel if the bumper is sold as multiple panels that can be used separately, shall have warning statements to address the following, at a minimum.

8.6.1 **BABIES HAVE SUFFOCATED** in loose bumpers and when trapped between bumpers and other objects in crib. Babies at greatest risk of suffocation include those younger than 4 months, those born prematurely, and those with respiratory problems.

- NEVER put pillows or ANYTHING ELSE in crib that could trap baby against bumper.
- Keep bumper TIGHT against side of crib. DO NOT use if bumper is loose or sags down toward sleeping surface.
- ONLY use bumper in an unbroken full-size crib. NEVER use in toddler bed or bassinet.

NOTE 5—For crib bumpers intended for use in a product other than a standard full-size crib, the manufacturer shall replace the phrase “full-size crib” with the specific type of product for which the bumper is intended.

8.6.2 To prevent ENTANGLEMENT or STRANGULATION, position ties to outside of crib and be sure they are secure.

8.6.3 Remove bumper when baby can pull to a stand using crib side (starting about 6 months). Older babies can use bumper to climb out of crib.

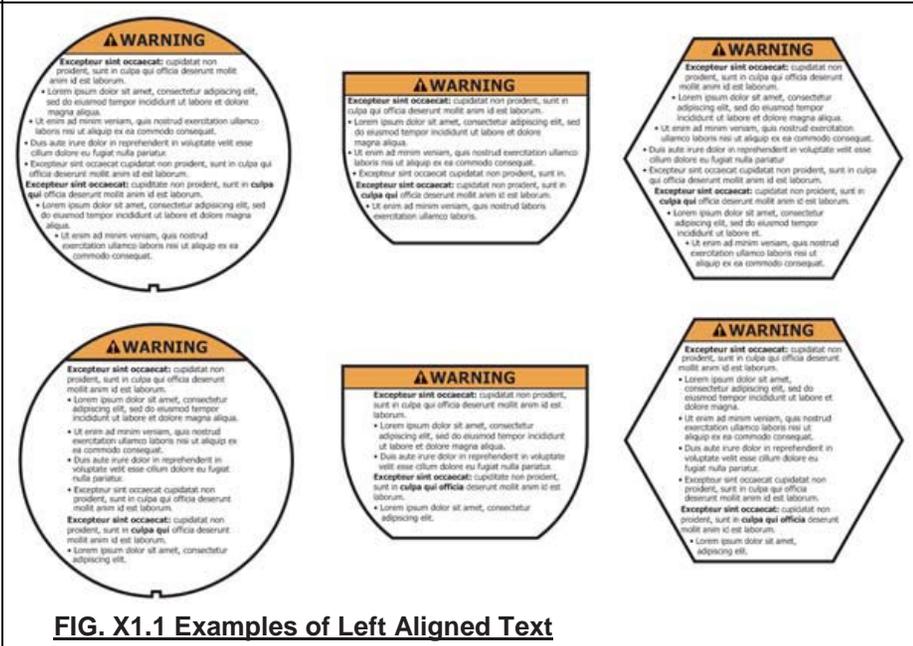
NOTE 6—Address means that verbiage other than what is shown can be used as long as the meaning is the same or information that is product-specific is presented.

Revised to be consistent with the approved language of the Ad Hoc Language Task Group, as of October 24, 2017 (Revision C). Revisions and additions to the required warnings are based on known hazard patterns and incidents, and include:

- language that identifies key suffocation hazard scenarios and infants most at risk;
- a clearer description of how the bumper should look when properly installed, and more concise language about when consumers should not use bumpers, based on their appearance;
- language that warns against placing pillows or other products into a crib that could trap an infant against the bumper;
- language that directs consumers to only use bumpers in an unbroken full-size crib; and
- language that identifies the approximate age at which bumpers should be removed, and why removing the bumper is necessary at this age or developmental stage.

Section numbering for warning statements intended for other products covered under F1917 would be renumbered as 8.7 (Fabric Wall Hanging), 8.8 (Mattress Covers), 8.9 (Pillows), 8.10 (Diaper Stacker), and 8.11 (Fitted Sheet).

<p>(No requirement)</p>	<div style="border: 2px solid black; padding: 10px;"> <p style="text-align: center; background-color: #f4a460; color: white; font-weight: bold; font-size: 1.2em; margin: 0;">⚠ WARNING</p> <p>BABIES HAVE SUFFOCATED in loose bumpers and when trapped between bumpers and other objects in crib. Babies at greatest risk of suffocation include those younger than 4 months, those born prematurely, and those with respiratory problems.</p> <ul style="list-style-type: none"> • NEVER put pillows or ANYTHING ELSE in crib that could trap baby against bumper. • Keep bumper TIGHT against side of crib. DO NOT use if bumper is loose or sags down toward sleeping surface. • ONLY use in an unbroken full-size crib. NEVER use in toddler bed or bassinet. <p>To prevent ENTANGLEMENT or STRANGULATION, position ties to outside of crib and be sure they are secure.</p> <p>Remove bumper when baby can pull to a stand using crib side (starting about 6 months). Older babies can use bumper to climb out of crib.</p> </div> <p style="text-align: center; font-weight: bold; margin-top: 10px;">FIG. 2 Example – Warning Statement Text Layout</p>	<p>Added an example warning, consistent with the approved language of the Ad Hoc Language Task Group, as of October 24, 2017 (Revision C).</p>
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<p>(No requirement)</p>	 <p style="text-align: center; font-weight: bold; margin-top: 10px;">FIG. X1.1 Examples of Left Aligned Text</p>	<p>Added to be consistent with the approved language of the Ad Hoc Language Task Group, as of October 24, 2017 (Revision C). Note that this figure is not shown in actual size.</p>
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9. Instructional Literature Requirements

ASTM F1917 – 12

Staff’s Proposed Revisions

Rationale

<p>(No requirement)</p>	<p><u>9. Instructional Literature</u></p> <p><u>9.1 Instructions shall be provided with the product and shall be easy to read and understand, and shall be in the English language at a minimum. These instructions shall include information on assembly, installation, maintenance, cleaning, and use, where applicable.</u></p> <p><u>9.2 The instructions shall include all warnings specified in 8.6, where applicable.</u></p> <p><u>9.3 The warnings in the instructions shall meet the requirements specified in 8.5.4, 8.5.5 and 8.5.6, except that sections 6.4 and 7.2–7.6.3 of ANSI Z535.4 need not be applied. However, the signal word and safety alert symbol shall contrast with the background of the signal word panel, and the warnings shall contrast with the background of the instructional literature.</u></p> <p><u>Note 7—For example, the signal word, safety alert symbol, and the warnings may be black letters on a white background, white letters on a black background, navy blue letters on an off-white background, or some other high-contrast combination.</u></p> <p><u>9.4 Any instructions provided in addition to those required by this section shall not contradict or confuse the meaning of the required information, or be otherwise misleading to the consumer.</u></p> <p><u>Note 8—For additional guidance on the design of warnings for instructional literature, please refer to ANSI Z535.6, American National Standard: Product Safety Information in Product Manuals, Instructions, and Other Collateral Materials.</u></p>	<p>Added a new Instructional Literature section, which is included in most ASTM juvenile products standards, and is consistent with the approved language of the Ad Hoc Language Task Group, as of October 24, 2017 (Revision C).</p> <p>F1917 – 12 section 9, <i>Keywords</i>, would be renumbered as section 10.</p>
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