



Standard Consumer Safety Performance Specification for Infant Bedding and Related Accessories¹

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INTRODUCTION

This consumer safety performance specification addresses incidents associated with infant bedding and related accessories that were reported to the U.S. Consumer Product Safety Commission (CPSC). These incident reports involved entanglement or strangulation on decorative ribbons, bumper guard ties, wall hangings, fitted sheets, and threads resulting from unraveled seams. It also addresses potential suffocation on decorative pillows placed in cribs.

In response to the incident data developed by the CPSC, this consumer safety performance specification attempts to minimize the problems listed above. This effort is accomplished through the establishment of performance requirements and warning labels for infant bedding and accessories. This specification cannot prevent incidents that occur as the result of unforeseeable abuse and misuse.

NOTE—This consumer safety performance specification is not intended to address incidents and injuries resulting from the interaction of other persons with children using these products or the incidents resulting from unforeseeable abuse and misuse.

This consumer safety performance specification has been written based on current state-of-the-art softgoods technology. This consumer safety performance specification will be updated whenever substantive information becomes available.

1. Scope

1.1 This consumer safety specification establishes safety performance requirements, test methods, and requirements for labeling to minimize the identified hazards to children presented by infant bedding and related accessories as identified in the introduction.

1.2 No infant bedding or related accessory produced after the approval date of the consumer safety performance specification shall indicate, either by label or other means, compliance with this specification unless it conforms to all applicable requirements contained herein.

1.3 The inspection and test procedures contained herein shall be used to determine the conformance of products to the requirements of this consumer safety performance specification. The relevant tests for an infant bedding product or related accessory can be done in any order, except where specified. Each test may be conducted on a different sample, unless otherwise specified. The tests can be considered as qualification tests and not necessarily as quality control tests. These tests shall also be conducted when there is a design or material change in the infant bedding or related accessory item. Each producer or distributor who represents any products as con-

forming to this specification may utilize statistically based sampling plans that are appropriate and shall keep such essential records as are necessary to document that all of the requirements of this specification have been met. Any test methods that are made mandatory by the CPSC, or any applicable governmental agencies, shall supersede any applicable test methods in this specification.

1.4 These tests are intended to simulate normal use conditions, so as to ensure that hazards are not generated through normal use. The tests shall be carried out in a normal use environment. For example, bumper guards should be secured in a crib as a customer would in actual end use situations. Ties should be tied and untied. While no specific requirements are defined here, the evaluator shall perform enough testing to simulate normal use during the estimated lifetime of the product. The infant bedding product or related accessory shall be inspected after such tests and shall be evaluated according to the relevant requirements listed within this specification.

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

1.6 The following safety hazards caveat pertains only to the test method portion, Section 7, of this consumer safety performance specification: *This standard does not purport to address 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.*

¹ This consumer safety performance specification is under the jurisdiction of ASTM Committee F-15 on Consumer Products and is the direct responsibility of Subcommittee F15.19 on Infant Bedding.

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2. Referenced Documents

- 2.1 *ASTM Standards:*
F 1169 Specification for Full-Size Baby Crib²
- 2.2 *Federal Standards:*³
16 CFR Part 1508 Full-Size Baby Crib
16 CFR Part 1509 Non-Full-Size Baby Crib
16 CFR Part 1500.50–1500.53 Test Methods for Simulating Use and Abuse of Toys and Other Articles Intended for Use by Children
- 2.3 *ANSI Standard:*⁴
ANSI Z535.4 Product Safety Signs and Labels

3. Terminology

- 3.1 *Definitions of Terms Specific to This Standard:*
 - 3.1.1 *bumper ties, n*—flexible ribbons, strings, and ties attached to a bumper for the purpose of attaching to a crib.
 - 3.1.2 *infant bedding and related accessories, n*—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.

4. General Requirements

- 4.1 *Ribbons, Strings, and Ties*—Ribbons, strings, and ties shall comply with the length requirements in 6.1.
- 4.2 *Threads*—Use of monofilament thread in the construction of infant bedding and related accessories is prohibited.
- 4.3 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).

5. Performance Requirements

- 5.1 *Normal Use Testing*—Simulation of normal use conditions are described in 1.4.
- 5.2 *Unsupported Vinyls*—Unsupported vinyl shall be 0.012-in. (0.30-mm) nominal thickness or thicker gage. No minimum thickness is specified for supported vinyl. Any infant bedding or related accessory item composed entirely or in part of unsupported vinyl shall be tested in accordance with 6.2.
- 5.3 If during the course of conducting tests in accordance with this specification, a test sample sustains any permanent deformation or damage, an additional test sample shall be used for the remainder of the tests.

6. Test Methods

6.1 *Ribbons, Strings, and Ties*—Flexible ribbons, strings, or ties attached to any infant bedding or related accessory item, with the exception of ties on bumper guards and headboard bumper guards, shall not exceed 7 in. (180 mm) when measured to the maximum length under a force of 5 lbf (22 N). Ribbons, strings, and ties on bumper guards and headboard

bumper guards, shall not exceed 9.0 in. (230 mm). If ribbons, strings, or ties can tangle to form a loop, then the perimeter of the loop shall not exceed 14 in. (360 mm) under a force of 5 lbf (22 N).

6.2 *Rationale*—The neck circumference of a 5th percentile 0-3 month old infant is 7.2 in. (183 mm), as stated in the University of Michigan final report to the CPSC dated January 1986. Based on this measurement, the Infant Bedding and Related Accessories Subcommittee has mandated the maximum allowable length of flexible ribbons, strings, or ties attached to any infant bedding or related accessory item, with the exception of bumper guards and headboard bumper guards, to be 7.0 in. (180 mm). The maximum allowable length of flexible ribbons, strings, or ties, or a combination thereof, attached to bumper guards and headboard bumper guards for the purpose of securing it to a crib rail is 9 in. (230 mm). Flexible ribbons, strings, or ties of 9 in. on bumper guards and headboard bumper guards will allow the product to be sufficiently secured to the crib rails by the parent or care provider. On some cribs, shorter ribbons, strings, or ties may not allow the parent or care provider to be able to sufficiently secure the bumper guard or headboard bumper guard, or both, to the crib rail.

6.3 *Vinyl Thickness Measurement*—Using a paper micrometer, measure the thickness at four locations, one at each end and two in a location near the middle.

7. Product/Package Marking

7.1 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).⁵

7.2 *Product Warning Labels*—A permanent conspicuous label(s) shall be on each headboard/bumper set, bumper, wall hanging, decorator pillow (label shall be applied to insert and cover, if cover is removable), diaper stacker, and fitted sheet. 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 not less than 0.1 in. (2.5 mm) high.

7.2.1 The warning label(s) for a headboard/bumper set or bumper shall read as follows:

⚠ WARNING
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.

7.2.2 The warning label for a fabric wall hanging shall read as follows:

⚠ WARNING

² Annual Book of ASTM Standards, Vol 15.07.
³ Code of Federal Regulations, available from U.S. Government Printing Office, Washington, DC 20402.
⁴ Available from American National Standards Institute, 11 W. 42nd St., 13th Floor, New York, NY 10036.

⁵ RN/WPL is the Registration Number/Wool Products Labeling Act under the Federal Trade Commission.

To prevent entanglement or strangulation, do not place within a child's reach (including a standing child).
Not intended as a toy.

7.2.3 The warning label for a pillow shall read as follows:

⚠ WARNING

To prevent suffocation, do not put any pillow in a crib or near an area where an infant may sleep.

Pillows are a decorator item only and are not intended for an infant's use.

7.2.4 The warning label for a diaper stacker shall read as follows:

⚠ WARNING

Prevent strangulation or entanglement.
Never place on or attach to a crib.

7.2.5 The warning label for a fitted sheet shall read as follows:

⚠ WARNING

Prevent possible strangulation or entanglement.
Never use crib sheet unless it fits securely on crib mattress.

7.3 *Package Warning Statement*—A warning statement shall be on each fitted sheet retail package. The warning statement shall be in the ANSI format as stated in 7.2.

7.3.1 The warning statement for a fitted sheet retail package shall read as follows:

⚠ WARNING

Prevent possible suffocation or entanglement.
Never use crib sheet unless it fits securely on crib mattress.

7.4 *Rationale*—Warning labels for headboard/bumpers, wall hangings, pillows, fitted sheets, and diaper stackers have been created to warn the consumer of the hazard that can exist if the product is not used as intended. In most cases, the hazards identified in each warning label are substantiated by data from in-depth investigations of accidents or fatalities, or both, involving the use of the aforementioned products. Based on these facts, the word “prevent,” instead of “possible,” is used in order to stress the importance of compliance with the stated warning. In addition, the word “Warning” is used as the signal word for these warning labels as ANSI Z535.4 states that “Warning” indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

8. Keywords

8.1 bumper guard; diaper stacker; fitted sheet; infant bedding; wall hanging

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