

February 2, 2024

## TRANSMITTED VIA EMAIL

RE: ASTM Ballot F15 (24-01), Item 1

Dear Mr. Campbell and Ms. King,

This letter is U.S. Consumer Product Safety Commission (CPSC) staff's<sup>1</sup> response to ballot F15 (24-01), Item 1, pertaining to revisions of ASTM F406 – 22, *Standard Consumer Safety Specification for Non-Full-Size Baby Cribs/Play Yards*. Item 1 proposes definitions and performance requirements to allow for padded floors in play yards.

Staff votes negative on this ballot for the following reasons:

- Global: The firmness requirements, which are planned to be balloted separately, intricately affect the overall safety of the requirements proposed in this ballot. The firmness requirements should be added to this ballot in order for staff to adequately evaluate the effect of all the proposed relevant requirements on the safe use of the product.
- 2. Line 7, Section 3.1.Y: The proposed definition of "mattress support" seems to be applicable only to configurations of play yards and not to non-full-size cribs. Therefore, definitions and requirements throughout the standard that reference this definition would also be affected, which may lead to ambiguity, especially for sections applying to non-full-size cribs such as Section 5 General Requirements and Section 6 Performance Requirements for Rigid Sided Products. Staff recommends reducing the specificity of the definition and simplifying it as "components that support the weight of the occupant and transfer the weight of the occupant to the frame of the product."

<sup>&</sup>lt;sup>1</sup> This letter was prepared by the CPSC staff. It has not been reviewed or approved by, and may not represent the views of, the Commission.

- 3. Line 7, Section 3.1.Y: The definition of "mattress support" specifies that it is a rigid component, but some products may have non-rigid components that support the weight of the occupant and transfer the weight of the occupant to the frame of the product per the definition. For example, some products have a rigid hardboard below the floor which supports the weight of the occupant but is suspended on the frame by the play yard's mesh sidewalls. This may affect the requirements throughout the standard that reference this term.
- 4. Line 23, Section 5.X.2: This requirement should be moved to section 7 Performance Requirements for Mesh/Fabric Products because rigid sided products are not subject to the mattress vertical displacement requirement.
- 5. Lines 63-71, Sections 7.X-7.X.3: Staff is concerned that this requirement, which allows for gaps along the perimeter of the floor and below the top surface of the floor, may increase the risk of gap entrapment, especially if a consumer adds an additional mattress on top of the floor. Adding an after-market mattress will increase the vertical depth of the gap to greater than 1.5 inches; additionally, this ballot does not propose any limitation on the horizontal width of the perimeter gap, which would further increase the risk of gap entrapment. Staff recommends requiring the top surface of the floor be attached/sewn into the sidewall such that no gap exists along the perimeter.
- 6. Line 74, Section 7.9.1.1: Changing the phrase "Mattress assemblies that incorporate an integral floor structure" to "segmented mattresses" excludes non-segmented mattresses and is therefore a reduction in scope for this requirement. Staff recommends removing this proposed change and reverting back to the original wording.
- 7. Line 111, Section 8.X.1.2: This test method does not specify a location along the side at which to place the aluminum block. This may lead to ambiguity and inconsistencies across test laboratories. Staff recommends specifying a location such as "most onerous location" to produce the most conservative measurement.

## Staff also has the following editorial comments:

- 8. Line 3, Section 3.1.14: The revised definition for "floor" (formerly "mattress support surface") is confusing. Please consider rewording the definition to state, "... that supports the mattress or segmented mattress, is the top surface of a segmented floor structure, or is the surface intended for the occupant to sit or sleep on when a separate mattress is not provided." Consider whether separately defining and establishing requirements relative to the sleep surface would help simplify and clarify these requirements.
- 9. Line 21, Section 5.16.2: The word "or" in the last sentence of this section should be changed to "and."

- 10. Line 111, Section 8.X.1.2: The words "segmented mattress support, or mattress support" are unclear and unnecessary. Staff recommends stating, "Place the aluminum block on the top surface of the floor if no mattress is provided with the product or on the top of the mattress if a mattress is provided…"
- 11. Line 141, Section 9.4.2.7: The term "mattress support system" should be changed to "mattress support attachment system" to be consistent with the proposed new definitions.
- 12. Global: All figures need captions explaining what is being depicted. Consider using color/shading to further differentiate and clarify the separate components depicted in the figures.

CPSC staff appreciates the subcommittee's efforts to establish performance requirements to make non-full-size cribs and play yards safer for children. As always, we are happy to discuss our comments at the next Task Group or Subcommittee Meeting.

Sincerely,

Frederick deGrano Mechanical Engineer

Directorate for Engineering Sciences

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cc: Jacqueline Campbell, CPSC Voluntary Standards Coordinator
Molly Lynyak, Staff Manager, ASTM Committee F15 on Consumer Products
Don Mays, Chair, ASTM Committee F15 on Consumer Products
Daniel Taxier, CPSC Children's Program Manager