



MEETING LOG

SUBJECT: ASTM F15.12 Firmness and Concavity Task Group

FY 25 OP PLAN ENTRY: Infant Bedding

DATE OF MEETING: 9/24/2025

LOCATION OF MEETING: Virtual

CPSC STAFF FILING MEETING LOG: Ashley Johnson (HSPP)

FILING DATE: 9/25/2025

CPSC ATTENDEE(S): Ashley Johnson, Ph.D. (HSPP), Daniel Taxier (ESMC), Tim Smith (ESHF), Suad Wanna-Nakamura, Ph.D. (HSPP)

NON-CPSC ATTENDEE(S): Contact ASTM for the full attendee list

Summary of Meeting:

This meeting of the ASTM F15.12 Firmness and Concavity Task Group (TG) was led by the chair of the TG, Hayden McKinley. The purpose of this TG is to develop test methods for firmness and concavity of infant and juvenile products.

The TG lead began the meeting by continuing the previous TG meeting discussion of laboratory testing pertaining to the concavity evaluation method proposed by staff¹. Discussion topics included:

- *Hinge gauge slipping study.* At the previous TG meeting, the TG members were concerned that the hinge gauge slipping down into the seat of the seated product could reduce the repeatability and reproducibility of the test results. In response, the TG reviewed recent laboratory test results of angle measurements taken from seated products, and the TG lead explained that rubber grip tape that prevents hinge gauge slipping did not markedly increase the repeatability of the test results but did change the angle slightly. The TG will continue to discuss the topic of hinge gauge placement in future meetings.
- *Modified design to device.* The vertical sides were removed, and a handle was added to the test device. The TG agreed that with these modifications the testing surface is easier to see, and functionality is improved.
- *Anthropometric data.* At the previous TG meeting, a TG member questioned the size of the test device used for the test and asked if a smaller device should be used because the test device targets 0- to 6-month-old infants, while most suffocation incidents are associated with infants younger than 6 months old. The TG reviewed a modified design with different measurements referencing a 4-month-old infant, which changes the shape of the testing device and therefore may alter pass/fail for some products. The TG agreed that the rationale for the sizing of the test device requires further TG discussion, and

¹ See staff's letter dated April 28, 2025: https://www.cpsc.gov/s3fs-public/Letter-ASTM-F15-12-Subcommittee-April-2025_0.pdf?VersionId=dZckEJatv.oJb0TVdM.GFaXGijlohw4j.



CPSC staff will provide the TG with additional anthropometric data as needed.

- *Product inserts.* The TG discussed how to test products with inserts that may influence the consistency of the test result and cause the product to fail. The TG discussed several possible paths forward including testing inserts as installed in the seated product, testing inserts separately from the seated product on a fixed stand, developing a modified test device for products with inserts, and exempting inserts. TG discussion centered around whether a fixed stand firmness test method offered a comparable metric to in-product concavity and whether the fixed stand firmness would be useful for inserts that are less than 1 inch thick (or if there should be an exemption). The TG agreed to continue the discussion on product insert testing at the next meeting.

Next Steps:

The next meeting is a subcommittee meeting which is scheduled for November 4, 2025, at 4:00pm ET.