

**LOG OF MEETING  
DIRECTORATE FOR ENGINEERING SCIENCES**

**SUBJECT:** Meeting of the ASTM Crib Mattress Cyclic Testing task group

**DATE OF MEETING:** 19 July 2018

**PLACE OF MEETING:** Virtual (teleconference)

**LOG ENTRY SOURCE:** Hope Nesteruk (ESMC)

**COMMISSION ATTENDEES:** Hope Nesteruk (ESMC), Suad Wanna-Nakamura (HSPP),  
Steve Harsanyi (ESHF) & Max Sanborn (LSM)

**NON-COMMISSION ATTENDEES:** Contact ASTM for attendee list.

**SUMMARY OF MEETING:**

The goal of this task group is to evaluate the need for firmness and cyclic testing performance requirements in the crib mattress standard.

*Firmness*

The task group chair began with a summary of the results of the last time the subcommittee considered the firmness standard. Concerns had been raised that there were no incidents where one could clearly say the mattress was “too soft.” During testing, some manufacturers noted that seams and mattress ticking affected the results, although there were few, if any, failures. During the discussion today, manufacturers raised the issue that they would need to make a mattress even firmer, in order to guarantee a mattress passes the test (to protect against variance in manufacture). They were concerned that now a mattress would be “too firm” and that could lead to more pillows and soft bedding.

*Compression*

After the firmness discussion, CPSC staff raised the issue that there were also reports of mattresses being too soft on the sides, such that sheets compressed a mattress to the point it formed a large gap. One task group member said this must be a thin mattress, and perhaps it could be solved by a minimum thickness of 3 inches. In addition, some thought it could be an issue related to “roll-up mattresses,” which is a term referring to mattresses that are compressed for shipping and must be allowed to expand for about 24 hours before use. The task group agreed to reconsider the condition period (currently 8 hours). In addition, the mattress measuring box, and the forces used to compress the mattress for measure, could also be adjusted to address this.

*Cyclic Testing*

The task group questioned the hazard that was to be addressed, and CPSC staff reported that the many of the reports were of coils poking through mattress ticking. There was some discussion of using the same impact test that is used for the crib mattress support testing. This has the advantage of an existing test method with which manufacturers are familiar. In addition, a potential cyclic rolling test was discussed. The task group is going to look at the tests used for adult mattresses for guidance on a possible rolling test. The goal will be to have something to present to the subcommittee at the October meeting.