

SUBJECT: ASTM F15 and F08 Juvenile Product Committee Week

DATE OF MEETING: May 13-16, 2019

PLACE OF MEETING: Denver, CO Hyatt

LOG ENTRY SOURCE: Kevin Lee (ESMC)

COMMISSION ATTENDEES: Kevin Lee (ESMC)

NON-COMMISSION ATTENDEES: Contact ASTM for attendee list.

SUMMARY OF MEETING: June 26, 2019

Monday, May 13, 2019:

F15.09

F1148 Home Playground Equipment

CPSC staff informed the subcommittee that there is a hold on directly giving out any data until further notice, but data may be obtained through a FOIA request.

The subcommittee discussed three comments about the ballot regarding the sidewall height on a curved cross-sectional slide bed. One of the comments was concerned about the drawing showing a sharp edge. Two comments were concerned about lateral discharge which this standard does not address. The subcommittee ask CPSC staff for any injury data about lateral discharge.

The subcommittee discussed ballot item 4 for acute angles (i.e. bracing under decking that isn't accessible). There were was a negative on this item as the commenter believes the torso entrapment is not addressed. The subcommittee determined that entrapment is address because the torso probe is used, but hand and finger entrapments are not address and would be considered new business. The subcommittee asked CPSC to look for any hand, finger, arm, or foot/feet entrapment for the past 10 years in home playgrounds.

In response to CPSC's March 11th, 2019 staff letter from Kevin Lee titled "Re: ASTM Ballot F15 (19-01), Item 4, Proposed Ballot Item for Acute Angles":

The subcommittee will be adding the following new sub-section to 6.2.1 (4) exempting inaccessible acute angles.

(4) *In accessible acute angle* completely bounded openings that do not accept the torso probe inserted into the opening to a depth greater than or equal to 4 inches using the test method as defined in 6.1.1 (see Fig. A1.7) are considered inaccessible.

A member of the subcommittee stated that the current definition of a platform is any elevated surface. He asked the subcommittee how to define a flexible surface like a trampoline that is intended for a child to crawl on. Dave Dick suggested using the deflection criteria from the constant inflatable standard. The subcommittee will consider utilizing the deflection criteria at the next meeting.

Subcommittee proposed to draft a section for the sidewall height for the slide near the transition platform in section 8.2.1.2 to read:

“8.2.1.2: any sliding surface extending past the deck shall have a sidewall height of at least 1” (any part of the transition area that extends past the platform is treated as a sliding surface) see figure xx”

CPSC staff will draft a line drawing of the transition area that extends past the deck with the 1” sidewall.

Tuesday/Wednesday, May 14/15, 2019:

Playground Equipment for Public Use meeting F1487

The Subcommittee requested CPSC staff for an update to the contract with Iowa University’s playground drop test report. Staff will try to get verbal update for the next meeting in November.

Subcommittee members were concerned about F14.10 on Specific Application and other fence systems and Components ASTM F2049 - 11(2017) Standard Safety Performance Specification for Fences/Barriers for Public, Commercial, and Multi-Family Residential Use Outdoor Play Area. The F14.10 standard states the requirements of where the fences should be placed but some members believe this requirement belongs in the public playground standard.

The subcommittee motioned to address clearance zones for impact hazards with upper body rotating equipment and defining “forced-movement”. The subcommittee discussed adding a subsection to 9.3.6 that no functionally linked play structure or part of a composite structure that generates forced movement of the user shall have an overlapping clearance and use zone.

The subcommittee broke into a non-climbable structures task group and a slides task group.

The non-climbable task group proposed to utilize parts of F1918 (The soft contained playground standard) into the public playground standard.

The non-climbable task group also discussed conditions for an enclosed structure. The follow is what has been work on:

8.16 Enclosed structures

8.16.1 A platform or play component that is within a fully enclosed structure shall have no designated fall height when there is no clear fall between the platform or play component and the protective surfacing.

8.16.2 The exterior that is enclosing the structure shall be a climb resistant surface within 84 inches of an underlying designated play surface.

Rationale: 84” is the reach range as defined from overhead obstructions

8.16.3 The exterior of the enclosed structure shall not have any structural supports greater than xx” diameter within 84” of a designated play surface.

Rationale: a support greater than xx” in diameter is difficult to climb. Think coconut tree.

8.16.4 A climb resistant surface shall have no ledges that project great than .38” that are within 30 degrees from below horizontal.

Rationale: The little finger length of the 5th percentile 5 year is 1.14”. 0.38” is 1/3rd the distance and the approximate length to the 1st knuckle.

8.16.5 A climb resistant surface shall meet the test procedure as defined in x.x

Rationale: this information is derived from the enclosed standard ASTM F1918.

To test climb resistant surfaces/nets, the subcommittee discussed aligning a toe probe (see figure A1.14) perpendicular to the surface. A one pound force would be applied to the toe probe, round end first, into the surface. A surface is climb resistant if the toe probe enters less than or equal to 0.5 inches deep.

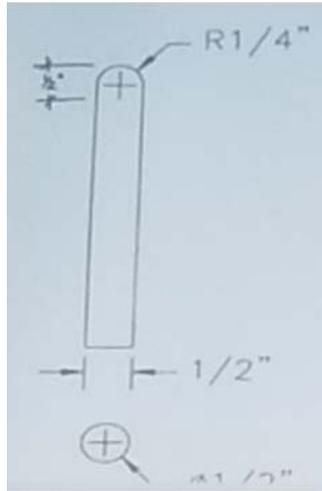


Figure A1.14

The Slides task group discussed adding the following requirements for tubular slides:

8.5.7.1 The fall height of fully enclosed tubular slide is the highest foot support as described in section xx. For tubular slides with an elevation greater than 8 feet, the minimum fall height is 8 feet.

x.x Fully enclosed portions of tubular slides are considered in-accessible when the following conditions are met.

x.x.1 the slide bedway slope along the path of travel is greater than 30 degrees.

x.x.2 The tubular slide is designed to reduce the likelihood of children climbing beyond the critical height of the impact attenuating surfacing. To reduce the likelihood of climbing on the exterior there shall not be any accessible hand/foot holds. Hand/fooholds are considered accessible if they are within 84 inches of each other or the nearest designated playing surface.

x.x.2.1 84 inches is measured from vertical to parallel with the slope of the slide and 36 inches on either side of the centerline of the foothold.

Thursday, May 16, 2019

Playground Surfacing meeting F2223

Some subcommittee members wanted 100% of the wire removed, but ASTM allows for metal particles with any dimension less than .5 inches. The majority of the members abstained.

The next meetings would be held in November 2019 at Houston, Texas.