



U.S. CONSUMER PRODUCT SAFETY COMMISSION  
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August 19, 2013

Ms. Teresa Hendy



Dear Ms. Hendy:

Thank you for contacting the U.S. Consumer Product Safety Commission (CPSC) regarding the *Handbook for Public Playground Safety* (the *Handbook*). Please note that unless otherwise indicated, the views expressed in this letter have not been reviewed or approved by, and may not necessarily reflect the views of, the Commission. Additionally, the *Handbook* is a set of recommendations; it is not a federal regulation. State or local jurisdictions are free to use the guidance in the *Handbook* as they wish, and local codes and regulations should always be followed. While CPSC technical staff is providing the following opinion, the technical staff can neither approve, nor disapprove, any specific installation or piece of playground equipment.

On June 5, 2013, you sent an e-mail message regarding the 2011 revision of ASTM F1487, Standard Consumer Specification for Public Playground Equipment, which contains revisions to the swing section. In your e-mail message, you noted that there are new multiple occupancy swings on the market that meet the requirements of F1487-11 but do not follow the recommendations in the *Handbook*. You stated that “[t]he issue is complex for States that mandate compliance with the CPSC Handbook as this type of swing clearly does not meet the recommendations of CPSC but does comply with the dynamic impact tests in ASTM” and asked if staff could “send a letter or make a statement that would clear this up.”

The 2010 publication of the *Handbook* contained the long-standing<sup>1</sup> recommendation:

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<sup>1</sup> This same recommendation is found in the 1994, 1997, and 2008 editions of the *Handbook*. The 1986 *Handbook* mentions “free swinging, empty swing seat” but does not contain this specific recommendation.

Multiple occupancy swings – With the exception of tire swings, swings that are intended for more than one user are not recommended because their greater mass, as compared to single occupancy swings, presents a risk of impact injury.

Specifically, as mentioned in the 1986 printing of the *Handbook*, the primary concern is head impact from empty, free-swinging swing seats.

Staff is aware that the 2011 edition of the ASTM F1487 voluntary standard implemented a new test method that measures the forces associated with the head form being impacted by a swing. Specifically, the new test method uses both peak acceleration and head injury criteria (HIC) and requires that suspended swing elements (*i.e.*, the swing seat) “shall not impart a peak acceleration in excess of 100 g and shall have a HIC score not to exceed 500....”

The CPSC technical staff members who work with playground equipment and playground surfacing note that the peak acceleration and HIC values selected by the F15.29 subcommittee are half of the values used in F1292, Standard Specification for Impact Attenuation of Surfacing Materials within the Use Zone of Playground Equipment, to measure head impact for playground surfacing, and these staff are of the opinion that the swing impact test in F1487-11 is a reasonable approach to address the concerns posed by unoccupied, heavy, multiple occupancy swings.

With respect to your statement regarding “states that mandate compliance with the CPSC Handbook,” staff would like to emphasize that the *Handbook* provides recommendations, not requirements. If a jurisdiction adopts the *Handbook's* recommendations as mandatory requirements, that jurisdiction would need to determine how its requirements should be applied in any particular instance.

Thank you for your continued work in the area of playground safety. I hope this information addresses your concerns.

Sincerely,

A handwritten signature in black ink, appearing to read 'Hope Nesteruk', with a long horizontal line extending to the right.

Hope E.J. Nesteruk  
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