



## **A POSITION STATEMENT ON CRITICAL FALL HEIGHT FOR PLAYGROUND SURFACES**

The International Play Equipment Manufacturers Association (IPEMA) validates playground surfacing to ASTM Standard F1292, Section 4.2. We have been asked about our exception to testing “critical fall height” for playground surfacing materials and following is our rationale for that position.

Critical fall height is defined as “a measure of the impact attenuation performance of a playground surface or surfacing materials, defined at the highest theoretical drop height from which a surface meets the impact attenuation performance criterion specified by this Specification.”

IPEMA’s surfacing certification program was established based upon specified fall height testing, which provides more information to the playground owner so they can determine, along with the surfacing manufacturer who has the most knowledge of the performance of their product, how the surfacing material will perform at a fall height that represents the actual fall heights of their playground equipment. This provides the playground owner information so they can purchase playground surfacing that will meet their needs not only when initially installed but as the playground ages, keeping maintenance in mind as a necessity. This includes installing a surfacing that is well below the HIC (1,000) and gMax (200) limits specified in the Standard, and NOT a surfacing that could possibly fail in a very short time period.

As an alternative to laboratory critical fall height testing, please note that F3313 (Standard Test Method for Determining Impact Attenuation of Playground Surfaces Within the Use Zone of Playground Equipment as Tested in the Field) allows the option of testing surface performance to the height specified or agreed to by the owner/operator prior to purchase, or the equipment fall height. IPEMA and our participants are most concerned that the surfacing performs well below the equipment fall height of the playground where the surfacing is installed and not at the critical fall height.

IPEMA’s mission is to promote play, encourage safety and provide certification programs for playground environments. We believe we are encouraging safety through specified fall height testing and encourage all users of playground surfacing to do the same.