



December 21, 2023

TRANSMITTED VIA EMAIL

Mr. Harvey Voris  
Chairman Subcommittee F08.30 Fitness Products  
HCV Consulting LLC  
Huntington Beach, CA 92646

Dear Mr. Voris:

During the November 9, 2023, F08.30 Treadmill Task Group Meeting, CPSC staff<sup>1</sup> expressed concern about the performance requirements in the draft proposal, which specify a rigid probe as a surrogate finger. Using a rigid probe may not effectively simulate finger entrapment because the probe will not compress into the gap between the moving tread and guard.

CPSC staff conducted preliminary testing using a rigid 3D printed finger probe and a compressible silicone finger probe of the same dimensions. The testing showed that a rigid finger probe did not get pulled into the gap between the mechanical guard and moving tread, but the compressible silicone finger probe was pulled into the gap. Staff assesses that a compressible finger probe is necessary to simulate a finger forced into the gap between the guard and the moving tread and will provide a higher and more appropriate margin of safety against the pull-in hazard than a rigid probe.

Staff requests that the task group develop a compressible finger probe and specify it instead of a rigid probe. Staff appreciates the task group's efforts and looks forward to continued collaboration on addressing staff's concerns. If you have any questions, please feel free to contact me.

Sincerely,

Frederick deGrano  
*Mechanical Engineer*  
*Directorate for Engineering Sciences*

cc: Jacqueline Campbell, CPSC Voluntary Standard Coordinator  
Joe Koury, ASTM F08 Staff Manager

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<sup>1</sup> This letter was prepared by the CPSC staff. It has not been reviewed or approved by, and may not represent the views of, the Commission.