



March 14, 2024

Rob Kinsler
ASTM Subcommittee Chair for F08.53, Helmets and Headgear
100 Barr Harbor Drive, PO Box C700
West Conshohocken, PA 19428-2959

Dear Mr. Kinsler:

The U.S. Consumer Product Safety Commission (CPSC) staff¹ reviewed ASTM F1447-18, *Standard Specification for Helmets Used in Recreational Bicycling or Roller Skating*. Staff recommends the following revisions for the subcommittee to consider.

1. Organize the Test Schedule

ASTM F1447 refers to ASTM F1446 for the *Impacting Schedule* and *Test Schedule*. ASTM F1446 Section 11, *Test Schedule*, lists the tests that are applicable and the order of testing. ASTM 1447 Section 9, *Impacting Schedule*, lists which conditioned helmets are subject to impacts. ASTM F447 Section 11, *Retention System Testing*, lists which conditioned helmets are subject to positional stability testing and which are subject to the Dynamic Strength Retention Test.

CPSC staff recommends organizing the test schedule into a supplement similar to Table 1203.13 of 16 C.F.R. part 1203, with all the information required to test bicycle helmets. This consolidation would include clarifying details such as those discussed below to ensure that tests are conducted consistently.

- a. The number of helmets that are subject to the *Dynamic Retention Test*.

ASTM F1447 specifies the required environmental conditioning for helmets before performing the Dynamic Retention Test. However, ASTM F1447 does not specify how many helmet samples should be tested. Staff recommends specifying the minimum number of helmets tested to the *Dynamic Retention Test* requirement. This minimum number should be at least four, to align with current regulatory requirements in 16 C.F.R. § 1203.13.

¹ The views or opinions expressed in this letter are solely those of the staff and may not represent those of the Commission.



b. Samples for curbstone impacts.

ASTM F1446 Section 12.8.2 states that there should be four impact sites on each helmet sample, “unless identified in the individual performance standard.” ASTM F1447 describes a single impact with the curbstone anvil for the second set of four helmet samples but does not specify if it is the only impact to be performed. Staff considers this section unclear regarding whether those samples receive additional impacts with other anvils. Staff recommends adding information that clarifies the minimum number of impacts for each helmet sample.

2. Improve warning label requirements.

ASTM F1447 refers to ASTM F1446 Section 12.4 for most of its warning label requirements. Many of the warning label requirements in ASTM F1446 are similar to those in 16 C.F.R part 1203. Staff recommends including the following into the applicable requirements:

- a. Standard wording regarding the possibility of “serious injury or death”; and
- b. The size and fitting instructions on the helmet itself.

These revisions would benefit consumers who may lose or dispose of the instructions over the life of the helmet.

Staff appreciates the subcommittee’s consideration of these recommendations and looks forward to working with the subcommittee to improve bicycle helmet safety.

Sincerely,

Greg Ota
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Directorate for Laboratory Sciences

Enclosure(s):

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