



Standard Specification for Helmets for Non-Motorized Wheeled Vehicles Used by Infants and Toddlers¹

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1. Scope

1.1 This specification covers performance requirements for helmets manufactured for use by infants and toddlers as passengers or operators of nonmotorized vehicles intended for their use. This specification recognizes the desirability of lightweight construction and ventilation; however, it is a performance standard and is not intended to restrict design.

1.2 All testing and requirements of this specification shall be in accordance with Test Methods F1446 except as noted.

1.3 Partial utilization of this standard is prohibited. Any statement of compliance with this specification must be a certification that the product meets all of the requirements of this specification in their entirety. A product that fails to meet any one of the requirements of this specification is considered to have failed this standard, and should not be sold with any indication that it meets parts of this standard.

1.4 Headgear that complies with this and other standards may proclaim uses as described in those standards as certified by the manufacturer.

1.5 The values stated in SI units are to be regarded as standard. No other units of measurement are included in this standard.

1.6 *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.*

2. Referenced Documents

2.1 *ASTM Standards:*²

F1446 Test Methods for Equipment and Procedures Used in

¹ This specification is under the jurisdiction of ASTM Committee F08 on Sports Equipment, Playing Surfaces, and Facilities and is the direct responsibility of Subcommittee F08.53 on Headgear and Helmets.

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² For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.

Evaluating the Performance Characteristics of Protective Headgear

3. Labels and Warnings

3.1 In addition to the labeling requirements outlined in Test Methods F1446, the helmet shall have the words "For use by infants and toddlers when riding non-motorized wheeled vehicles intended for their use" inscribed on one of the interior permanent labels.

4. Marking the Test Line

4.1 The test line is shown in Fig. 1 and shall be marked in accordance with Test Methods F1446.

5. Conditioning and Number of Samples

5.1 Four helmets of each model and size are required for testing.

5.2 Conditioning of test samples is described in Test Methods F1446.

6. Headforms

6.1 Headforms to be used in this specification are sizes A, C, and E according to Test Methods F1446, using the variable mass drop assembly configuration. The appropriate size headform shall be selected in accordance with Test Methods F1446 for the helmet to be tested.

6.2 The headform center of gravity specified in Appendix X1 of Test Methods F1446 will be allowed an additional tolerance in the X-axis. The tolerance allows the location of the center of gravity to lie between -6.5 mm and 40 mm of the center of the ball socket (positive X is toward the monorail where applicable).

7. Peripheral Vision Requirement

7.1 The peripheral vision requirements shall be as specified in Test Methods F1446.

8. Retention System Testing

8.1 Retention system tests will be performed before impact testing. The retention system shall be tested in accordance with Test Methods F1446 using a 7-kg \pm 5 % support assembly.