



## Standard Specification for Headgear Used in Soccer<sup>1</sup>

This standard is issued under the fixed designation F2439; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon ( $\epsilon$ ) indicates an editorial change since the last revision or reapproval.

### INTRODUCTION

Soccer is a sport with inherent risks. Participation in the sport implies acceptance of risk of injury.

This specification was developed to address forces of some of the incidental (non-ball) head impacts that may occur while engaging in soccer. Although headgear satisfying this specification may provide limited protection against heading impacts which are generally sub-concussive, heading impacts are not addressed by this specification. In addition, the issue of multiple sub-concussive impacts is not addressed here. Note—Protection provided by headgear satisfying this specification is not equivalent to the protection provided by rigid “helmets” used in many other sports activities. Headgear that meets these standard specifications may not provide significant protection in some head impact situations.

This specification is intended to be used with other standards and documents listed in the Referenced Documents.

### 1. Scope

1.1 This specification defines performance requirements for headgear used for participation in the sport of soccer. The technical requirements in this specification do not address the administrative requirements of soccer governing bodies, so it should not be assumed that any headgear satisfying this specification will be acceptable for use in sanctioned soccer events.

1.2 This specification is intended to reduce the forces from external physical sources reaching the defined impact area of the head in impacts that may occur in the sport of soccer. No headgear can provide protection against all impacts, foreseeable or not. This specification does not address the potential for injury from any type of impact. The tests specified in this specification are laboratory simulation tests only, and do not purport to create situations identical to the impacts that may occur during the playing of soccer.

1.3 All testing and requirements of this specification shall be in accordance with Test Methods F1446, except where noted herein. In the event of a discrepancy between the requirements of this specification and those of Test Methods F1446, this specification shall prevail.

1.4 Partial utilization of this specification is prohibited. Any statement of compliance with this specification shall be a

certification that the headgear meets all of the requirements of this specification in its entirety. Headgear that fails to meet any one of the requirements of this specification is considered to have failed the specification and should not be sold with any indication that it meets parts of the specification.

1.5 The values stated in SI units are to be regarded as the 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:<sup>2</sup>

F1446 Test Methods for Equipment and Procedures Used in Evaluating the Performance Characteristics of Protective Headgear

#### 2.2 Other Documents:<sup>3</sup>

49 CFR Part 572, Subpart E Anthropometric Test Dummies Procedures for Assembly, Disassembly, and Inspection (PADI) of the Hybrid III 50th Percentile Dummy's Nine Accelerometer Array Head (NAAH) with Redundant Head C. G. Accelerometers

<sup>1</sup> 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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<sup>2</sup> For referenced ASTM standards, visit the ASTM website, [www.astm.org](http://www.astm.org), or contact ASTM Customer Service at [service@astm.org](mailto:service@astm.org). For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.

<sup>3</sup> Available from National Highway Traffic Safety Administration (NHTSA), 400 7th St., NW, Washington, DC 20590.