



# Standard Specification for Helmets Used in Short Track Speed Ice Skating (Not to Include Hockey)<sup>1</sup>

This standard is issued under the fixed designation F1849; 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.

## 1. Scope

1.1 This specification covers performance requirements for helmets used by short track speed ice skaters (excluding hockey). 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 where noted herein.

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

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

1.5 *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, health, and environmental practices and determine the applicability of regulatory limitations prior to use.*

1.6 *This international standard was developed in accordance with internationally recognized principles on standardization established in the Decision on Principles for the Development of International Standards, Guides and Recommendations issued by the World Trade Organization Technical Barriers to Trade (TBT) Committee.*

## 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

## 3. Labels and Warnings

3.1 Labels and warnings shall meet the requirements of Test Methods F1446.

3.2 Labels and warnings shall have the words “For short track speed ice skating (excluding hockey)” inscribed on one of the interior permanent labels.

3.3 Headgear designed to comply with this and other standards may proclaim uses as certified by the manufacturer.

## 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

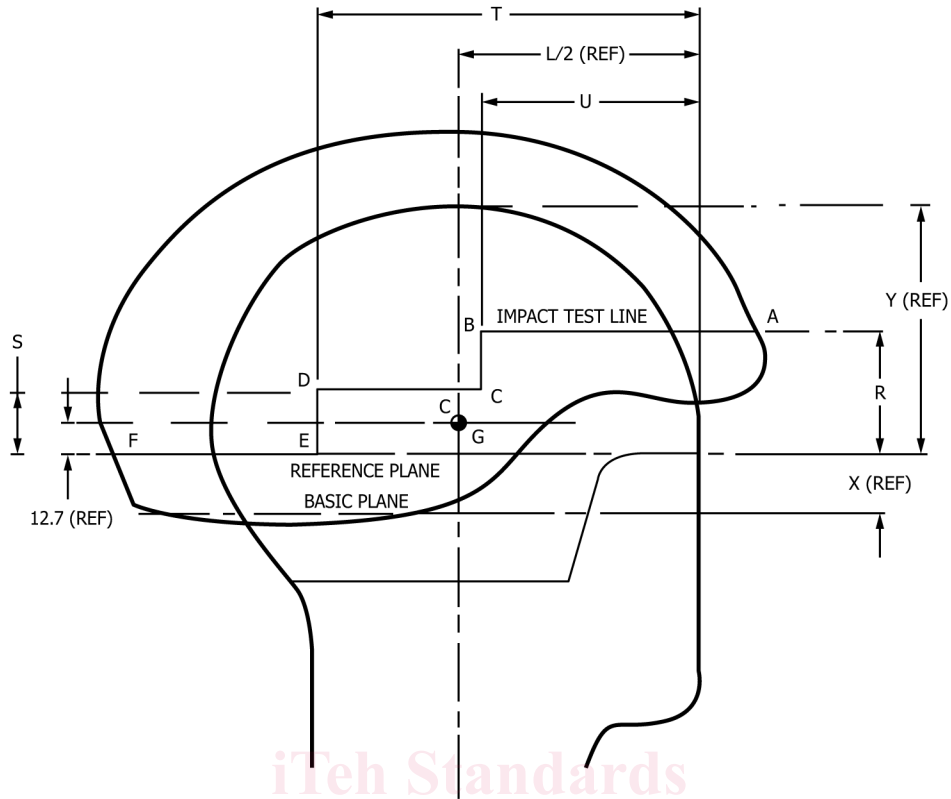
5.1 Conditioning shall be in accordance with Test Methods F1446.

5.2 The test requires a minimum of four samples of each shell/liner combination.

<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, 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.



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 Document Preview

Headform Size	Dimensions (mm)						
	X	L/2	Y	R	S	T	U
A	24.0	88.0	89.7	47.0	23.0	142.0	84.0
C	25.0	91.0	92.7	38.5	23.5	146.5	86.0
E	26.0	94.5	96.0	49.0	24.0	151.0	88.0
J	27.5	101.0	102.5	50.5	25.0	160.0	92.0
M	29.0	106.0	107.0	52.0	27.0	166.0	96.0
O	30.0	108.5	110.0	53.0	27.0	170.0	97.0

NOTE 1—The center of impact can be anywhere on or above the test line.

FIG. 1 Marking the Test Line ABCDEF

## 6. Retention System Testing

6.1 Retention system tests shall be performed before impact testing.

6.2 The ambient helmet shall be subjected to the positional stability (roll-off) test in accordance with Test Methods F1446 using a 4-kg drop mass from a height of 0.6 m.

6.3 The retention system shall remain intact, and the helmet must remain on the headform.

6.4 The hot, cold, and wet helmets shall be subjected to the dynamic strength retention test in accordance with Test Methods F1446 using a 4-kg drop mass from a height of 0.6 m.

6.5 The retention system shall remain intact without elongating more than 30 mm.

## 7. Impact Sites and Projections

7.1 Impact sites are described in Test Methods F1446.

7.2 Projections—Any unfaired projection extending more than 7 mm from the helmet’s outer surface shall break away or collapse when impacted with forces equivalent to those produced by applicable impact-attenuation tests described in Section 9. There shall be no fixture on the helmet’s inner surface projecting more than 2 mm into the helmet interior except occipital stabilizers and foam fit pads.