AS 5578:2026
EN 1077:2007

Helmets for alpine skiers and snowboarders (EN 1077:2007, IDT)

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- Australian Industry Group
- Australian Institute of Landscape Architects
- Consumers' Federation of Australia
- Engineers Australia
- Institute of Public Works Engineering Australasia
- Parks and Leisure Australia
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- Sports And Play Industry Association
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This page explains the meaning of the language and structure of this Standard.

Refer to Standards Australia's Standardisation Guide 006 for more details about drafting rules.

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Requirements

To conform to a Standard, all requirements in the Standard need to be met.

A requirement is any statement in the Standard which uses the word "shall".

Recommendations, permissions and possibilities

The following words are commonly used in Standards, but statements using them do not have to be followed to conform to the Standard:

(a) "should" means that something is recommended.

(b) "may" means that something is permitted.

(c) "can" means that something is possible.

Structure of Standards

A Standard always has the following parts:

(i) The Preface states who developed the Standard, what the Standard is aiming to do, and how it relates to other documents.

(ii) The Scope states what the Standard is about, what it covers and what it does not cover.

(iii) The Normative references clause lists other documents that are referenced in the Standard as part of requirements.

(iv) The Terms and definitions clause defines important terms to help with understanding the Standard.

A Standard may also include other parts, such as the following:

(1) A normative appendix sets additional requirements that need to be conformed to.

(2) An informative appendix provides additional information or guidance. They usually do not contain requirements. If an informative appendix does contain requirements, the Standard will explain when those requirements apply.

(3) A Bibliography lists documents referenced in the Standard but not as part of requirements.

Many Standards include notes. Notes provide recommendations and/or guidance only. They never contain requirements.

Preface

This Standard was prepared by the Standards Australia Committee CS-101, Sports and recreational facilities and equipment.

The objective of this document is to provide performance requirements and tests for two classes of helmets for alpine skiers, snowboarders and for similar groups, including children and participants in competitions. The document comprises two different classes of protection, class A and class B.

Requirements and the corresponding methods of test, where appropriate, are given for —

(a) construction including field of vision;

(b) shock absorbing properties;

(c) resistance to penetration;

(d) retention system properties; and

(e) marking and information.

This document is identical to, and has been reproduced from, EN 1077:2007, *Helmets for alpine skiers and snowboarders*.

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Australian or Australian/New Zealand Standards that are identical adoptions of international normative references may be used interchangeably. Refer to the online catalogue for information on specific Standards.

The terms “normative” and “informative” are used in Standards to define the application of the appendices or annexes to which they apply. A “normative” appendix or annex is an integral part of a Standard, whereas an “informative” appendix or annex is only for information and guidance.

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Contents

Page

Preface ..... **v**
National foreword ..... **vii**
Foreword ..... **viii**
Introduction ..... **ix**
1 Scope **1**
2 Normative references **1**
3 Terms and definitions **1**
4 Requirements **2**
4.1 Materials 2
4.2 Construction 3
4.2.1 General 3
4.2.2 Retention system 3
4.3 Field of vision 4
4.4 Extent of coverage 4
4.4.1 Class A 4
4.4.2 Class B 4
4.5 Shock absorbing capacity 6
4.6 Resistance to penetration 6
4.7 Retention system performance 6
4.7.1 Strength 6
4.7.2 Effectiveness 6
4.8 Durability 6
5 Testing **6**
5.1 Sampling 6
5.2 Inspection and determination of mass 7
5.3 Conditioning 7
5.3.1 Room conditioning 7
5.3.2 Low temperature conditioning 7
5.3.3 Artificial ageing 7
5.4 Test areas 7
5.4.1 General 7
5.4.2 Test area for class A 7
5.4.3 Test area for class B 8
5.5 Determination of shock absorbing capacity 9
5.5.1 Apparatus 9
5.5.2 Procedure 9
5.6 Determination of resistance to penetration 10
5.6.1 Apparatus 10
5.6.2 Procedure 10
5.7 Determination of retention system strength 10
5.7.1 Apparatus 10
5.7.2 Procedure 10
5.8 Determination of retention system effectiveness 11
5.8.1 Apparatus 11
5.8.2 Procedure 11
5.9 Test report 11
6 Marking **11**
7 Information to be supplied by the manufacturer **11**
Appendix ZA (informative) **13**
Bibliography **14**

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National foreword

As part of the review of EN 1077:2007, Committee CS-101 has endorsed ASTM F2040-18 as an equivalent Standard to EN 1077:2007. ASTM F2040-18 may be used interchangeably with this document.

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Foreword

This document (EN 1077:2007) has been prepared by Technical Committee CEN/TC 158 “Head protection”, the secretariat of which is held by BSI.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by February 2008, and conflicting national standards shall be withdrawn at the latest by February 2008.

This document supersedes EN 1077:1996.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive 89/686/EEC.

For relationship with EU Directive, see informative Annex ZA, which is an integral part of this document.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

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Introduction

The intention of helmets is to reduce the risk of injury to the skull and part of the head surrounded by the helmet.

The protection given by a helmet depends on the circumstances of the accident and wearing a helmet cannot always prevent death or long term disability.

A proportion of the energy of an impact is absorbed by the helmet, thereby reducing the force of the blow sustained by the head. The structure of the helmet may be damaged in absorbing this energy and any helmet that sustains a severe blow should be replaced even if damage is not apparent.

To achieve the performance of which it is capable, and to ensure stability on the head, a helmet should be as closely fitting as possible consistent with comfort. In use it is essential that the helmet is securely fastened, with any chin strap under proper tension at all times.

Although the experience of the existing standard for alpine skiers is very good, it has become more and more obvious that there is a need for an alternative standard that can meet the demand from skiers and snowboarders who desire more ventilation and better hearing. This has resulted in two classes of helmets, class A and class B. Compared to class B, class A protects a larger area of the head and offers a higher degree of protection from penetration.

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Australian Standard®

Helmets for alpine skiers and snowboarders (EN 1077:2007, IDT)

1 Scope

This European Standard is applicable to performance requirements and tests for two classes of helmets for alpine skiers, snowboarders and for similar groups, including children and participants in competitions. The standard comprises two different classes of protection, class A and class B.

Requirements and the corresponding methods of test, where appropriate, are given for the following:

— construction including field of vision;

— shock absorbing properties;

— resistance to penetration;

— retention system properties;

— marking and information.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 960, *Headforms for use in the testing of protective helmets*

EN 13087-2:2000, *Protective helmets — Test methods — Part 2: Shock absorption*

EN 13087-3:2000, *Protective helmets — Test methods — Part 3: Resistance to penetration*

EN 13087-4:2000, *Protective helmets — Test methods — Part 4: Retention system effectiveness*

EN 13087-5:2000, *Protective helmets — Test methods — Part 5: Retention system strength*

EN 13087-6, *Protective helmets — Test methods — Part 6: Field of vision*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1
protective helmet
item to be worn on the head, intended to absorb the energy of a foreseeable impact thus reducing the risk of injury to the head

3.2
shell
outer layer which provides part of the whole general form of the helmet

3.3
helmet type
category of helmets which does not differ in such essential respects as the materials or dimensions or construction of the helmet, or of the retention system

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