

Helmets for canoeing and whitewater sports

The European Standard EN 1385:1998, with the incorporation of amendment A1:2005, has the status of a British Standard

ICS 13.340.200

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National foreword

This British Standard is the official English language version of EN 1385:1998, including amendment A1:2005.

The start and finish of text introduced or altered by CEN amendment is indicated in the text by tags **A1** **A1**. Tags indicating changes to CEN text carry the number of the CEN amendment. For example, text altered by CEN amendment A1 is indicated by **A1** **A1**.

The UK participation in its preparation was entrusted by Technical Committee PH/6, Head protection, to Subcommittee PH/6/6, Protective helmets for sport and leisure activities, which has the responsibility to:

The preparation of this British Standard was entrusted to Subcommittee, B/508/1, Waste containers and associated lifting devices on refuse collection vehicles, upon which the following bodies were represented:

- aid enquirers to understand the text;
- present to the responsible international/European committee any enquiries on the interpretation, or proposals for change, and keep UK interests informed;
- monitor related international and European developments and promulgate them in the UK.

A list of organizations represented on this subcommittee can be obtained on request to its secretary.

Cross-references

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Summary of pages

This document comprises a front cover, an inside front cover, the EN title page, pages ii and iii, a blank page, pages 1 to 14, a blank page and a back cover.

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English version

Helmets for canoeing and white water sports

(includes amendment A1:2005)

Casques utilisés dans la pratique du canoë-kayak et
des sports en eau vive
(inclut l'amendement A1:2005)

Helme für den Kanu- und Wildwassersport
(enthält Änderung A1:2005)

This European Standard was approved by CEN on 11 October 1997. Amendment A1 was approved by CEN on 10 January 2005.

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CEN

European Committee for Standardization
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Central Secretariat: rue de Stassart 36, B-1050 Brussels

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Foreword

This European Standard 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 May 1998, and conflicting national standards shall be withdrawn at the latest by May 1998.

This European Standard 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(s).

For relationship with EU Directive(s), see informative Annex ZA, which is an integral part of this standard.

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

Foreword to amendment A1

This document (EN 1385:1997/A1:2005) has been prepared by Technical Committee CEN/TC 158, “Head protection”, the secretariat of which is held by BSI.

This Amendment to the European Standard EN 1385:1997 shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by August 2005, and conflicting national standards shall be withdrawn at the latest by August 2005.

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(s).

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Introduction

The most common head injury in canoeing and white water sports happens when a person strikes an underwater object after capsizing. Under these circumstances it is extremely unlikely that the speed of impact will be greater than 18 km/h (5 m/s) because this is the highest recorded rate of flow in a white water river. The most common site of injury is the frontal or forehead area or the side of the eye socket.

To achieve the performance of which the helmet is capable, and to ensure stability on the head, it needs to be as close fitting as possible consistent with comfort. The helmet has to be securely fastened on to the head, and any chin strap has to be under tension at all times.

The protection given by a helmet depends on the circumstances of the accident and wearing a helmet does not 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 needs to be replaced even if damage is not apparent.

This standard includes the International Canoe Federation classification of risks.

1 Scope

This European Standard specifies requirements for helmets for canoeing and white water sports for use in waters of classes 1 to 4 as classified by Clause 4. The levels of protection recognize that most fatalities in canoeing and white water sports result from drowning after concussion and not from brain damage.

This standard is not intended to apply to helmets for use in extreme white water situations such as those where the jumping of high waterfalls is undertaken, because the need for impact absorption for such a helmet, and the area of the head to be protected, are greater than those for most canoeing and white water sports. The standard applies to helmets with and without holes in the shell.

NOTE This standard does not provide performance requirements for visors, chin-guards or face-guards.

2 Normative references

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

EN 960:1994, *Headforms for use in the testing of protective helmets*

ISO 6487:1987, *Road vehicles — Measurement techniques in impact tests — Instrumentation*

3 Definitions

For the purposes of this European Standard the following definitions apply:

3.1

canoeing

normal use of a canoe or of a kayak, in white water of classes 1 to 4 classified in accordance with Clause 4

3.2

white water sports

non powered sporting activities carried out in and/or on moving water as defined by classes 1 to 4 in accordance with Clause 4

3.3

helmet

headwear that is intended to protect the wearer's head from concussion