

AS/NZS 1801:1997

Australian/New Zealand Standard[®]

Occupational protective helmets

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This Joint Australian/New Zealand Standard was prepared by Joint Technical Committees SF/18, Occupational Protective Helmets and SF/42, Helmets for Firefighters. It was approved on behalf of the Council of Standards Australia on 18 July 1997 and on behalf of the Council of Standards New Zealand on 14 July 1997. It was published on 5 September 1997.

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New Zealand Helmet Testing Interests
New Zealand Logging Industry Research Association
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Department of Bush Fire Services New South Wales
Department of Defence, Australia
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PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee SF/18 on Occupational Protective Helmets together with the Joint Standards Australia/Standards New Zealand Committee SF/42 on Firefighters' Helmets, to supersede AS 1801—1981 *Industrial safety helmets* and NZS 5806:1980—*Specification for industrial safety helmets (medium protection)*.

This Standard was thoroughly revised with the objectives of incorporating improvements based on user experience since it was last published and including additional performance requirements for, and classification of, occupational helmets for use in high temperature workplaces and bushfire fighting.

During the preparation of this edition, the committee again considered the requirements of ISO 3873, *Industrial Safety Helmets*. It was agreed to align the Standard closer to ISO 3873 by adopting an alternative method of shock absorption measurement by using a load cell.

In the preparation of this Standard, reference was made to EN 397 *Specification for Industrial Safety Helmets*, and ANSI Z89.1 *Protective Headwear for Industrial Workers—Requirements*.

The Committee is currently considering revising the stiffness test in order to decrease variability between laboratories. It is expected the results of this review will be incorporated in the next revision.

The terms 'normative' and 'informative' have been used in this Standard to define the application of the appendix to which they apply. A 'normative' appendix is an integral part of a Standard, whereas an 'informative' appendix is only for information and guidance.

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STANDARDS AUSTRALIA/STANDARDS NEW ZEALAND

Australian/New Zealand Standard
Occupational protective helmets

SECTION 1 SCOPE AND GENERAL

1.1 SCOPE This Standard specifies requirements for occupational protective helmets to protect wearer's heads from falling objects in building and construction, quarrying, shipbuilding, forestry and other occupations with similar hazards.

These requirements include the construction and materials of the helmet shell and head harness, mechanical strength of the shell and finish of the helmet.

Methods of test referred to in this Standard are set out in Appendices A to F inclusive.

This Standard does not specify requirements for helmets for motor vehicle users, pedal cyclists, horse riders and structural firefighters. For such requirements see AS 1698, AS/NZS 2063, AS 2063.1 and 2063.3 and AS 4067 respectively.

Guidance on the selection, use and maintenance of occupational protective helmets is given by AS 1800.

1.2 OBJECTIVE The objective of this Standard is to specify protective helmets that are to be worn in a variety of occupations, in order to reduce the severity of head injury from hazards associated with such activities.

1.3 CLASSIFICATION Three types of occupational protective helmets are specified in this Standard, namely:

- (a) Type 1—general industrial safety helmets.
- (b) Type 2—helmets intended for high temperature workplaces.
- (c) Type 3—helmets intended for bushfire fighting.

The requirements in Sections 2, 3 and 4 of this Standard apply to all occupational protective helmets (Types 1, 2 and 3) unless the clause is specifically designated as being additional or optional for special purposes. Additional requirements applying to Types 2 and 3 helmets are identified in Table 1. Optional requirements for special purposes e.g. for underground mining, are shown in Table 2 (see also AS 1800).

NOTE: None of the requirements listed in Table 1 are mandatory for general industrial, Type 1, helmets but may be specified by contract.



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