Australian/New Zealand Standard®

Occupational protective helmets

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.

The following interests are represented on Committees SF/18 and SF/42:

Auckland Employers and Manufacturers Association Australasian Institute of Mining and Metallurgy Australian Association of Certification Bodies Australian Chamber of Commerce and Industry Australian Fire Authorities Council The Australian Gas Association Bureau of Steel Manufacturers of Australia Department of Bush Fire Services, New South Wales Department of Labour, New Zealand Joint Coal Board, Australia Neurosurgical Society of Australasia New Zealand Employers and Manufacturers Association New Zealand Fire Service New Zealand Helmet Testing Interests New Zealand Logging Industry Research Association New Zealand Professional Firefighters Union Safety Institute of Australia Telstra Work Health Authority, Northern Territory

Additional interests participating in preparation of Standard:

Department of Bush Fire Services New South Wales Department of Defence, Australia Metal Trades Industry Association of Australia United Firefighters Union of Australia

WorkCover New South Wales

Review of Standards. To keep abreast of progress in industry, Joint Australian/New Zealand Standards are subject to periodic review and are kept up to date by the issue of amendments or new editions as necessary. It is important therefore that Standards users ensure that they are in possession of the latest edition, and any amendments thereto.

Full details of all Joint Standards and related publications will be found in the Standards Australia and Standards New Zealand Catalogue of Publications; this information is supplemented each month by the magazines 'The Australian Standard' and 'Standards New Zealand', which subscribing members receive, and which give details of new publications, new editions and amendments, and of withdrawn Standards.

Suggestions for improvements to Joint Standards, addressed to the head office of either Standards Australia or Standards New Zealand, are welcomed. Notification of any inaccuracy or ambiguity found in a Joint Australian/New Zealand Standard should be made without delay in order that the matter may be investigated and appropriate action taken.

This Standard was issued in draft form for comment as DR 94212.

Australian/New Zealand Standard®

Occupational protective helmets

Originated in Australia as AS Z10—1961.
Final Australian edition AS 1801—1981.
Originated in New Zealand as NZSS 1585—1960 (being endorsement of BS 2826—1957 with Amendments).
Final New Zealand edition NZS 5806:1980.
AS 1801—1981 and NZS 5806:1980 jointly revised, amalgmated and designated AS/NZS 1801:1997.

Incorporating: Amdt 1—1999

PUBLISHED JOINTLY BY:

STANDARDS AUSTRALIA 1 The Crescent, Homebush NSW 2140 Australia

STANDARDS NEW ZEALAND Level 10, Radio New Zealand House, 155 The Terrace, Wellington 6001 New Zealand

2

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.

© Copyright — STANDARDS AUSTRALIA/STANDARDS NEW ZEALAND

Users of Standards are reminded that copyright subsists in all Standards Australia and Standards New Zealand publications and software. Except where the Copyright Act allows and except where provided for below no publications or software produced by Standards Australia or Standards New Zealand may be reproduced, stored in a retrieval system in any form or transmitted by any means without prior permission in writing from Standards Australia or Standards New Zealand. Permission may be conditional on an appropriate royalty payment. Australian requests for permission and information on commercial software royalties should be directed to the head office of Standards Australia. New Zealand requests should be directed to Standards New Zealand.

Up to 10 percent of the technical content pages of a Standard may be copied for use exclusively in-house by purchasers of the Standard without payment of a royalty or advice to Standards Australia or Standards New Zealand.

Inclusion of copyright material in computer software programs is also permitted without royalty payment provided such programs are used exclusively in-house by the creators of the programs.

Care should be taken to ensure that material used is from the current edition of the Standard and that it is updated whenever the Standard is amended or revised. The number and date of the Standard should therefore be clearly identified.

The use of material in print form or in computer software programs to be used commercially, with or without payment, or in commercial contracts is subject to the payment of a royalty. This policy may be varied by Standards Australia or Standards New Zealand at any time.

3

CONTENTS

CECTI	ON 1 SCOPE AND GENERAL	Page
3EC11	SCOPESCOPE AND GENERAL	1
1.1	OBJECTIVE	
1.2	CLASSIFICATION	
1.3	REFERENCED DOCUMENTS	
1.5	DEFINITIONS	
1.5	NOMINAL VALUES AND TOLERANCES	
1.7	INTERPRETATION OF SPECIFIED LIMITING VALUES	
SECTION	ON 2 MATERIALS	
2.1	~	
2.2	HEADBAND AND CRADLE MATERIALS	. 9
SECTION	ON 3 DESIGN AND CONSTRUCTION	
3.1	GENERAL	. 10
3.2	SHELL	. 10
3.3	RETENTION SYSTEM	. 10
3.4	HELMET ACCESSORIES	. 11
3.5	DIMENSIONS	. 12
3.6	VENTILATION	13
3.7	HELMET MASS	. 13
SECTI	ON 4 PERFORMANCE TESTING	
4.1	GENERAL	1.4
4.2	APPLICATION OF TESTS	
4.3	CONDITIONING	
4.4	ELECTRICAL RESISTANCE TEST	
4.5	STIFFNESS TEST	
4.6	SHOCK ABSORPTION TEST	
4.7	RESISTANCE TO PENETRATION	
4.8	THERMAL PERFORMANCE	
4.9	ADDITIONAL THERMAL REQUIREMENTS	
4.10		
	ON 5 MARKING	
5.1		
5.2	HARNESS	. 17
APPEN	VDICES	
A	ELECTRICAL INSULATION TEST	. 18
В	STIFFNESS TEST	. 20
C	SHOCK ABSORPTION TEST	. 21
D	PENETRATION TEST	. 24
	THERMAL PERFORMANCE	
F	METHODS FOR THE DETERMINATION OF THERMAL STABILITY	
	AT ELEVATED TEMPERATURES	29
G	ALUMINIUM BAR TEST METHOD FOR CONDUCTING	
	SHOCK ABSORPTION TESTS ON A ROUTINE BASIS	. 31



	This is a free preview.	Purchase the e	entire publication	at the link below:
--	-------------------------	----------------	--------------------	--------------------

Product Page

- Dooking for additional Standards? Visit Intertek Inform Infostore
- Dearn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation