

AS/NZS 3678:1996

Australian/New Zealand Standard[®]

**Structural steel—Hot-rolled plates,
floorplates and slabs**

AS/NZS 3678:1996

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee BD/23, Structural Steel. It was approved on behalf of the Council of Standards Australia on 31 October 1995 and on behalf of the Council of Standards New Zealand on 13 November 1995. It was published on 5 February 1996.

The following interests are represented on Committee BD/23:

Association of Consulting Engineers, Australia
Australian Chamber of Commerce and Industry
AUSTROADS
Bureau of Steel Manufacturers of Australia
Heavy Engineering Research Association, New Zealand
Metal Trades Industry Association of Australia
New Zealand Manufacturers Federation
Steel Institute of Australia

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which subscribing members receive, and which give details of new publications, new editions and amendments, and of withdrawn Standards.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.

AS/NZS 3678:1996

Australian/New Zealand Standard[®]

**Structural steel—Hot-rolled plates,
floorplates and slabs**

PUBLISHED JOINTLY BY:

STANDARDS AUSTRALIA
1 The Crescent,
Homebush NSW 2140 Australia

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

ISBN 0 7337 0196 5

PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee BD/23 on Structural Steel to supersede AS 3678—1990.

The objective of this Standard is to specify requirements for hot-rolled plates, floorplates and slabs for general structural and engineering applications.

This edition incorporates Amendment No. 1 and the following major changes:

- (a) Addition of new grade 450.
- (b) 'Freedom from defects' and 'Removal of surface defects' clauses have been deleted and replaced with new 'Freedom from defects' clause based on the following international Standards:
 - (i) ISO 7788: 1985, *Steel—Surface finish of hot-rolled plates and wide flats—Delivery requirements*.
 - (ii) EN 10163: 1991, *Delivery requirements for surface condition of hot-rolled steel plates, wide flats and sections, Part 1: General requirements and Part 2: Plates and wide flats*.
- (c) Provision is made for impact tests on plate thicknesses less than 8 mm using full thickness test piece.
- (d) Appendix B is updated.

The term 'informative' has been used in this Standard to define the application of the appendix to which it applies. 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.

CONTENTS

	<i>Page</i>
1 SCOPE	4
2 REFERENCED DOCUMENTS	4
3 DEFINITIONS	5
4 DESIGNATION	7
5 CHEMICAL COMPOSITION	8
6 MANUFACTURING TOLERANCES	11
7 FREEDOM FROM DEFECTS	11
8 SELECTION OF TEST SAMPLES	14
9 POSITION AND ORIENTATION OF TEST PIECES	14
10 PREPARATION OF TEST PIECES FOR MECHANICAL TESTING	14
11 TESTING PROCEDURES	16
12 MECHANICAL TEST REQUIREMENTS	16
13 IDENTIFICATION	18
14 ROUNDING OF NUMBERS	18
 APPENDICES	
A PURCHASING GUIDELINES	19
B MEANS FOR DEMONSTRATING COMPLIANCE WITH THIS STANDARD	21
C COLD-BENDING AND HOT-FORMING OF PLATE DURING FABRICATION	25

Originated in Australia as part of AS A1—1925.
 Previous edition AS 3678—1990.
 Jointly revised and designated AS/NZS 3678:1996.

Incorporating:
 Amdt 1—1999

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

[Product Page](#)

-
- [Looking for additional Standards? Visit Intertek Inform Infostore](#)
 - [Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation](#)
-