

AS/NZS 3678:2016
(Incorporating Amendment No. 1)

AS/NZS 3678:2016

Australian/New Zealand Standard™

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



AS/NZS 3678:2016

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee BD-023, Structural Steel. It was approved on behalf of the Council of Standards Australia on 13 January 2016 and on behalf of the Council of Standards New Zealand on 21 January 2016.

This Standard was published on 5 April 2016.

The following are represented on Committee BD-023:

Australian Chamber of Commerce and Industry
Australian Industry Group
Australian Steel Association
Australian Steel Institute
Austroads
Bureau of Steel Manufacturers of Australia
Business New Zealand
New Zealand Heavy Engineering Research Association
Steel Construction New Zealand
University of New South Wales
University of Sydney

Keeping Standards up-to-date

Standards are living documents which reflect progress in science, technology and systems. To maintain their currency, all Standards are periodically reviewed, and new editions are published. Between editions, amendments may be issued. Standards may also be withdrawn. It is important that readers assure themselves they are using a current Standard, which should include any amendments which may have been published since the Standard was purchased.

Detailed information about joint Australian/New Zealand Standards can be found by visiting the Standards Web Shop at www.saiglobal.com or Standards New Zealand web site at www.standards.govt.nz and looking up the relevant Standard in the on-line catalogue.

For more frequent listings or notification of revisions, amendments and withdrawals, Standards Australia and Standards New Zealand offer a number of update options. For information about these services, users should contact their respective national Standards organization.

We also welcome suggestions for improvement in our Standards, and especially encourage readers to notify us immediately of any apparent inaccuracies or ambiguities. Please address your comments to the Chief Executive of Standards Australia or the New Zealand Standards Executive at the address shown on the back cover.

This Standard was issued in draft form for comment as DR AS/NZS 3678.

AS/NZS 3678:2016
(Incorporating Amendment No. 1)

Australian/New Zealand Standard™

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

Originated in Australia as part of AS A1—1925.
Originated in New Zealand as AS/NZS 3678:1996.
Previous edition 2011.
Fourth edition 2016.
Reissued incorporating Amendment No. 1 (December 2017).

COPYRIGHT

© Standards Australia Limited

© The Crown in right of New Zealand, administered by the New Zealand Standards Executive

All rights are reserved. No part of this work may be reproduced or copied in any form or by any means, electronic or mechanical, including photocopying, without the written permission of the publisher, unless otherwise permitted under the Copyright Act 1968 (Australia) or the Copyright Act 1994 (New Zealand).

Jointly published by SAI Global Limited under licence from Standards Australia Limited, GPO Box 476, Sydney, NSW 2001 and by Standards New Zealand, PO Box 1473, Wellington 6140.

ISBN 978 1 76035 433 6

PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee BD-023, Structural Steel, to supersede AS/NZS 3678:2011.

This Standard incorporates Amendment No. 1 (December 2017). The changes required by the Amendment are indicated in the text by a marginal bar and amendment number against the clause, note, table, figure or part thereof affected.

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

This edition includes the following major changes from the previous edition.

- (a) Requirements for type testing and minimum production testing and inspections have been included in the normative appendix on product conformity.
- (b) Test certificates are required to be available for all products produced to this Standard.
- (c) Labelling requirements have been added to enable products compliant with this Standard to be traceable back to their corresponding test certificate.
- (e) Definitions, clause numbering and layout across the four steel-product Standards AS/NZS 1163, AS/NZS 3678, AS/NZS 3679.1 and AS/NZS 3679.2 are consistent, wherever practicable.
- (f) Additional definitions in Clause 3.
- (g) Notation clause removed as duplicated in document. All notation defined in line.
- (h) Sulfur limits for some Z grades.
- (i) Internal soundness clause added.
- (j) Tensile test dimensions defined.
- (k) Through thickness tested grades down to 12 mm thickness.
- (l) Mechanically tested grades up to 200 mm thickness.
- (m) L0 impact tested grades have been reintroduced.
- (n) 'None' impact designation has been removed.
- (o) Option for zinc coating classification referring to AS/NZS 2312.2, Clause 9.1.

A statement expressed in mandatory terms in a note to a table is deemed to be a requirement of this Standard.

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.

CONTENTS

	<i>Page</i>
1 SCOPE.....	4
2 NORMATIVE REFERENCES	4
3 DEFINITIONS.....	5
4 DESIGNATION.....	8
5 MANUFACTURING PROCESS	9
6 CHEMICAL COMPOSITION	10
7 MANUFACTURING TOLERANCES.....	13
8 FREEDOM FROM DEFECTS.....	13
9 TESTING.....	16
10 MECHANICAL PROPERTIES	19
11 IDENTIFICATION, TEST AND INSPECTION CERTIFICATES.....	22
12 SAMPLING AND TESTING TO DEMONSTRATE PRODUCT CONFORMITY ..	24
13 ROUNDING OF NUMBERS.....	24
14 MANIPULATION	25
 APPENDICES	
A PURCHASING GUIDELINES	26
B PRODUCT CONFORMITY	28
C COLD-BENDING AND HOT-FORMING OF PLATE DURING FABRICATION..	33
D NOT USED.....	34
E NOT USED.....	35
F STEEL FOR SEISMIC AND FRACTURE CRITICAL APPLICATIONS (NEW ZEALAND ONLY)	36
 BIBLIOGRAPHY	 38

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](#)
-