Share your feedback about this standard.
Scan the QR code on your phone or click/ enter the link to take the survey feedback.standards.org.au/1554.3:2014

AS/NZS 1554.3:2014 (Incorporating Amendment No. 1)

Australian/New Zealand Standard™

Structural steel welding

Part 3: Welding of reinforcing steel





AS/NZS 1554.3:2014

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee WD-003, Welding of Structures. It was approved on behalf of the Council of Standards Australia on 24 September 2014 and on behalf of the Council of Standards New Zealand on 12 September 2014.

This Standard was published on 25 November 2014.

The following are represented on Committee WD-003:

Australian Corrosion Association
Australian Chamber of Commerce and Industry
Australian Industry Group
Australian Steel Institute
Austroads
Bureau of Steel Manufacturers of Australia
Energy Networks Association
Engineers Australia
New Zealand Heavy Engineering Research Association
New Zealand Non-destructive Testing Association
Steel Reinforcement Institute of Australia
University of Sydney
Welding Technology Institute of Australia

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 Standards may also be withdrawn.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 online 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 1554.3.

AS/NZS 1554.3:2014 (Incorporating Amendment No. 1)

Australian/New Zealand Standard™

Structural steel welding

Part 3: Welding of reinforcing steel

Originated in Australia as AS CA8.3—1970.
Originated in New Zealand as AS/NZS 1554.3:2002.
Previous edition 2008.
Third edition 2014.
Reissued incorporating Amendment No. 1 (November 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.

PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee WD-003, Welding of Structures, to supersede AS/NZS 1554.3:2008.

This Standard incorporates Amendment No. 1 (November 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 provide a code for the welding of reinforcing steel.

This edition takes cognizance of the ISO Standards for the welding of reinforcing steels, ISO 17660-1, Welding—Welding of reinforcing steel, Part 1: Load-bearing welded joints and ISO 17660-2, Welding—Welding of reinforcing steel, Part 2: Non load-bearing welded joints and, where deemed relevant by the Committee, appropriate requirements have been incorporated or adopted with modification. Changes associated with Australia and New Zealand adopting the ISO welding consumable Standards have also been included in this edition, as have changes to maintain consistency with other parts of the AS/NZS 1554 series of Standards.

The differences from the 2008 edition of AS/NZS 1554.3 are as follows:

- (a) Clarification of general requirements: Clauses 1.1, 1.4.13, 1.4.15.1, 1.6.2, 4.11, Table 4.11(A) and Figure 3.1.3.
- (b) Changes associated with alignment with AS/NZS 1554.1: Clauses 1.3, 1.7, 3.1.8, 4.1, 4.2, 4.3, 4.4, 4.6.2, 5.3, 6.2.2, 6.5, 6.7, 7.2, Tables 4.7.1(A), 4.7.1(B), 5.3, and Figure 3.3.2(A).
- (c) Changes to welding consumable classification Standards: Clauses 2.3.1, G4, and Tables 3.2, 4.6(A), 4.6(B).
- (d) Clarification of requirements for the welding of non-loadbearing welding joints: Clause 3.3, 5.6, Tables 3.3 (new), 4.7.1(B) and 4.12.2(A) and Figure 3.3.2(B).
- (e) Correction of errors and other amendments: Clauses 1.4.16, 1.9.3, 4.12.1, 4.12.2, 5.7.3, G4, Tables 4.1.2(B), 4.12.2(B), 5.3 (Title only) and Table F3.
- (f) New Appendix G.

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.

Statements expressed in mandatory terms in notes to tables are deemed to be requirements of this Standard.

CONTENTS

		Page
SECTIO	ON 1 SCOPE AND GENERAL	
1.1	SCOPE	5
1.2	INNOVATION	
1.3	NORMATIVE REFERENCES	5
1.4	DEFINITIONS	
1.5	WELD CATEGORY	
1.6	WELDING OF REINFORCING STEEL	
1.7	MANAGEMENT OF QUALITY	8
1.8	JOINING REINFORCING STEEL TO STRUCTURES	8
1.9	SAFETY PRECAUTIONS	8
SECTIO	ON 2 MATERIALS OF CONSTRUCTION	
2.1	PARENT MATERIAL	10
2.2	BACKING MATERIAL	10
2.3	WELDING CONSUMABLES	10
SECTIO	ON 3 DETAILS OF FUSION-WELDED CONNECTIONS	
3.1	GENERAL	
3.2	LOADBEARING WELDED JOINTS	14
3.3	NON-LOADBEARING WELDED JOINTS [see Appendix E, Item (j)]	15
SECTIO	ON 4 QUALIFICATION OF PROCEDURES AND PERSONNEL FOR F	USION
WELDI	NG	
4.1	QUALIFICATION OF WELDING PROCEDURE	
4.2	METHODS FOR QUALIFICATION OF WELDING PROCEDURE	19
4.3	PREQUALIFIED WELDING PROCEDURES	
4.4	PORTABILITY OF QUALIFIED WELDING PROCEDURES	
4.5	PREQUALIFIED JOINT PREPARATIONS	20
4.6	QUALIFICATION OF WELDING CONSUMABLES	
4.7	QUALIFICATION OF WELDING PROCEDURES BY TESTING	
4.8	EXTENSION OF QUALIFICATION	
4.9	COMBINATION OF PROCESSES	
	RECORDS OF TESTS	
	REQUALIFICATION OF FUSION WELDING PROCEDURES	
4.12	QUALIFICATION OF WELDING PERSONNEL	27
SECTIO	ON 5 WORKMANSHIP	
5.1	PREPARATION OF MATERIAL FOR WELDING	
5.2	ASSEMBLY	
5.3	PREHEAT AND INTER-RUN CONTROL	
5.4	POSTIONING OF WORK	
5.5	WELDING UNDER ADVERSE WEATHER CONDITIONS	
5.6	TACK WELDS	
5.7	BACK GOUGING AND REPAIR OF DEFECTS IN WELDS	
5.8	ARC STRIKES	33



	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