

AS/NZS 2041.4:2010

AS/NZS 2041.4:2010

Australian/New Zealand Standard™

Buried corrugated metal structures

**Part 4: Helically formed sinusoidal
pipes**



AS/NZS 2041.4:2010

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee CE-025, Corrugated Metal Drainage Pipes and Arches. It was approved on behalf of the Council of Standards Australia on 23 June 2010 and on behalf of the Council of Standards New Zealand on 28 June 2010.
This Standard was published on 10 August 2010.

The following are represented on Committee CE-025:

AUSTROADS

Australasian Railway Association
Australian Chamber of Commerce and Industry
Australian Industry Group
Galvanizers Association of Australia
Main Roads Department Queensland
New Zealand Heavy Engineering Research Association
University of Queensland

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 Standards may also be withdrawn.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.au or Standards New Zealand web site at www.standards.co.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 either Standards Australia or Standards New Zealand at the address shown on the back cover.

AS/NZS 2041.4:2010

Australian/New Zealand Standard™

Buried corrugated metal structures

Part 4: Helically formed sinusoidal pipes

First published as AS 1761—1979.

Second edition 1985.

AS 1761—1985 jointly revised and redesignated, in part, as AS/NZS 2941.4:2010.

COPYRIGHT

© Standards Australia Limited/Standards New Zealand

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, Private Bag 2439, Wellington 6140

ISBN 978 0 7337 9654 8

PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee CE-025, Corrugated Metal Pipes and Arches, to supersede AS 1761—1985, adopted by Standards New Zealand as NZS 4405 in 1986.

The objective of this Standard is to provide designers, manufacturers and installers of buried helical lock-seamed sinusoidal metal pipes with requirements for the manufacture of such pipe for use in earthworks, primarily as culverts or accessways.

This Standard is Part 4 of the AS/NZS 2041 series, *Buried corrugated metal structures*, which comprises the following parts:

AS/NZS

- 2041 Buried corrugated metal structures
- 2041.1 Part 1: Design methods
- 2041.2 Part 2: Installation
- 2041.4 Part 4: Helically formed sinusoidal pipes (this Standard)
- 2041.6 Part 6: Bolted plate structures

Other parts of the series currently being drafted include the following:

- Part 3: Assessment of existing structures
- Part 5: Helically formed ribbed pipes
- Part 7 Bolted plate structures with transverse stiffeners
- Part 8: Metal box structures

This Edition includes the following changes:

- (a) Design requirements have been moved to AS/NZS 2041.1 *Buried corrugated metal structures* Part 1: *Design methods*, which includes new limit states methods.
- (b) Installation requirements are now referred to AS/NZS 2041.2 *Buried corrugated metal structures*, Part 2: *Installation*.
- (c) Notation is based on ISO 3898, *Bases for design of structures—Notations—General symbols*.
- (d) Materials and fabrication requirements have been updated.
- (e) Materials covered now include galvanized steel, polymer-coated steel, steel with aluminized coating and aluminium strip.
- (f) Reference tables for cover limits have not been included.

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>
SECTION 1 SCOPE AND GENERAL	
1.1 SCOPE	4
1.2 DESIGN AND INSTALLATION	4
1.3 NORMATIVE REFERENCES	5
1.4 DEFINITIONS	5
1.5 NOTATION	6
1.6 MARKING	7
SECTION 2 MATERIALS, TOLERANCES AND MANUFACTURE	
2.1 SCOPE OF SECTION	8
2.2 MATERIALS	8
2.3 TOLERANCES	8
2.4 MANUFACTURE	9
2.5 COUPLING SYSTEMS	12
2.6 MATCH MARKING	14
2.7 DEFECTS AND COATINGS	15
SECTION 3 CORRUGATIONS AND SECTION PROPERTIES FOR DESIGN	
3.1 SCOPE OF SECTION	16
3.2 DIMENSIONS AND TOLERANCES	16
3.3 MATERIAL AND SECTION PROPERTIES	17
APPENDICES	
A DESIGN INFORMATION FOR SUPPLY AND INSTALLATION	23
B MEANS FOR DEMONSTRATING COMPLIANCE WITH THIS STANDARD	27
C LOCK-SEAM STRENGTH TEST	29
D COUPLING BANDS	31
BIBLIOGRAPHY	32

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
-