

Australian Standard™

Cathodic protection of metals

Part 2: Compact buried structures

This Australian Standard was prepared by Committee MT-014, Corrosion of Metals. It was approved on behalf of the Council of Standards Australia on 6 May 2003 and published on 27 June 2003.

The following are represented on Committee MT-014:

Australian Gas Association
AUSTROADS
Australasian Corrosion Association
Australian Aluminium Council
Australian Chamber of Commerce and Industry
Australian Electrolysis Committee
Australian Institute of Steel Construction
Australian Paint Approval Scheme
Bureau of Steel Manufacturers of Australia
Department of Defence (Australia)
Division of Building, Construction and Engineering, CSIRO
Galvanizers Association of Australia
Ministry of Economic Development (New Zealand)
New Zealand Abrasive Blasting Association
United Water International
Water Services Association of Australia

Additional interests participating in the preparation of this Standard:

Building Research Association of New Zealand
Corrosion engineers and consultants
Galvanic anode manufacturers
Telstra Corporation
Victorian Gas Industry

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 Standards may also be withdrawn.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 Standards can be found by visiting the Standards Australia web site at www.standards.com.au and looking up the relevant Standard in the on-line catalogue.

Alternatively, the printed Catalogue provides information current at 1 January each year, and the monthly magazine, *The Global Standard*, has a full listing of revisions and amendments published each month.

We also welcome suggestions for improvement in our Standards, and especially encourage readers to notify us immediately of any apparent inaccuracies or ambiguities. Contact us via email at mail@standards.com.au, or write to the Chief Executive, Standards Australia International Ltd, GPO Box 5420, Sydney, NSW 2001.

AS 2832.2—2003

Australian Standard™

Cathodic protection of metals

Part 2: Compact buried structures

Originated as AS 2832.2—1991.
Second edition 2003.

COPYRIGHT

© Standards Australia International

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.

Published by Standards Australia International Ltd
GPO Box 5420, Sydney, NSW 2001, Australia

ISBN 0 7337 5320 5

PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee MT-014, Corrosion of Metals, at the request of industry to supersede AS 2832.2—1991, *Guide to the cathodic protection of metals*, Part 2: *Compact buried structures*. After consultation with stakeholders in both countries, Standards Australia and Standards New Zealand decided to develop this Standard as an Australian, rather than an Australian/New Zealand Standard.

The objective of this Standard is to specify the technical requirements for the cathodic protection of compact buried structures.

This Standard is Part 2 of the AS and AS/NZS 2832 series of Standards, titled *Cathodic protection of metals*, currently comprising four parts. The other three parts are as follows:

AS or AS/NZS

2832 Cathodic protection of metals

2832.1 Part 1: Pipes and cables

2832.3 Part 3: Fixed immersed structures

2832.4 Part 4: Internal surfaces

To enable this Standard to be referred to in regulations, it now contains requirements for cathodic protection and differs from the other Standards in the AS 2832 series which give guidelines for cathodic protection.

There are no International Standards (ISO) on the cathodic protection of metals.

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>
FOREWORD	5
SECTION 1 SCOPE AND GENERAL	
1.1 SCOPE.....	6
1.2 REFERENCED DOCUMENTS.....	6
1.3 DEFINITIONS.....	8
SECTION 2 COMPETENCE OF PERSONNEL	
SECTION 3 CRITERIA FOR CATHODIC PROTECTION	
3.1 SCOPE AND GENERAL	14
3.2 PROTECTION CRITERIA.....	14
3.3 OVERPROTECTION	16
SECTION 4 MEASURING TECHNIQUES AND EQUIPMENT	
4.1 GENERAL.....	17
4.2 POTENTIAL MEASUREMENT AND EQUIPMENT	17
SECTION 5 DESIGN OF STRUCTURES TO ACCOMMODATE CATHODIC PROTECTION	
5.1 SCOPE AND GENERAL	19
5.2 MATERIALS OF CONSTRUCTION.....	19
5.3 COATED AND UNCOATED STRUCTURES.....	19
5.4 ELECTRICAL HAZARDS AND DISTURBANCES	19
5.5 TEST POINTS.....	20
5.6 INSULATING JOINTS (ISOLATING JOINTS).....	21
5.7 ROAD AND RAIL CROSSINGS	22
5.8 ELECTRICAL ISOLATION	22
5.9 ELECTRICAL CONTINUITY	23
SECTION 6 DESIGN OF CATHODIC PROTECTION SYSTEMS	
6.1 SCOPE AND GENERAL	24
6.2 SAFETY HAZARDS.....	24
6.3 DESIGN REQUIREMENTS.....	25
6.4 DESIGN DATA.....	25
6.5 MATERIALS.....	26
6.6 TEST POINTS.....	27
6.7 REFERENCES	27
6.8 ELECTRICAL EARTHING	27
6.9 GRAPHICAL SYMBOLS	27
SECTION 7 INSTALLATION OF CATHODIC PROTECTION SYSTEMS	
7.1 SCOPE.....	28
7.2 APPROVAL TO INSTALL	28
7.3 INSTALLATION PRACTICE.....	28
7.4 INSPECTION REQUIREMENTS FOR MATERIALS AND EQUIPMENT	29
7.5 INSTALLATION OF GALVANIC ANODE SYSTEMS	30
7.6 INSTALLATION OF IMPRESSED CURRENT ANODE SYSTEMS	30
7.7 INSTALLATION OF INSULATED FLANGES, JOINTS AND COUPLINGS	31

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
-