

Australian/New Zealand Standard™

Paints for steel structures

Part 2: Ultra high-build paint



AS/NZS 3750.2:2008

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee CH-003, Paints and Related Materials. It was approved on behalf of the Council of Standards Australia on 19 March 2007 and on behalf of the Council of Standards New Zealand on 3 March 2007.

This Standard was published on 19 May 2008.

The following are represented on Committee CH-003:

AUSTROADS

Australasian Corrosion Association
Australian Paint Approval Scheme
Australian Paint Manufacturers' Federation
Australian Pipeline Industry Association
Business New Zealand
Engineers Australia
Institution of Professional Engineers New Zealand
Master Painters Australia
Master Painters New Zealand Association
National Association of Testing Authorities Australia
Water Corporation Western 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 Standards may also be withdrawn.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.standards.com.au or Standards New Zealand website at www.standards.co.nz and looking up the relevant Standard in the on-line catalogue.

Alternatively, both organizations publish an annual printed Catalogue with full details of all current Standards. 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.

Australian/New Zealand Standard™

Paints for steel structures

Part 2: Ultra high-build paint

Original as AS 3750.2—1994.
Revised and redesignated AS/NZS 3750.2:2008.

COPYRIGHT

© Standards Australia/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.

Jointly published by Standards Australia, GPO Box 476, Sydney, NSW 2001 and Standards New Zealand, Private Bag 2439, Wellington 6020

ISBN 0 7337 8660 X

PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee CH-003, Paints and Related Materials to supersede AS 3750.2—1994.

The objective of this Standard is to provide requirements for ultra high-build paints intended for use on iron and steel structures. It forms part of a series of product Standards for paints referred to in AS/NZS 2312, *Guide to the protection of structural steel against atmospheric corrosion by the use of protective coatings*.

See AS/NZS 3750.0 for other published Standards in this series.

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 REFERENCED DOCUMENTS	4
1.3 DEFINITIONS	4
1.4 SAFETY PRECAUTIONS	5
SECTION 2 MATERIALS REQUIREMENTS	
2.1 GENERAL	6
2.2 CONDITIONS OF TEST.....	6
2.3 LIQUID PAINT.....	6
2.4 SPRAY APPLICATION PROPERTIES.....	6
2.5 APPLIED FILM	7
2.6 MIXING RATIO	8
2.7 ADDITIONAL TESTS.....	8
SECTION 3 PACKAGING AND LABELLING	
3.1 PACKAGING.....	9
3.2 LABELLING.....	9
APPENDICES	
A PURCHASING GUIDELINES.....	10
B GUIDANCE ON THE USE AND APPLICATION OF UHB PAINT.....	11
C REFERENCED DOCUMENTS	14
D PREPARATION OF TEST PANEL.....	15
E DETERMINATION OF THE CURING TIME OF POLYESTER AND VINYL ESTER UHB PAINT	16
F ADDITIONAL TESTS.....	18

STANDARDS AUSTRALIA/STANDARDS NEW ZEALAND

**Australian/New Zealand Standard
Paints for steel structures****Part 2: Ultra high-build paint**

SECTION 1 SCOPE AND GENERAL

1.1 SCOPE

This Standard specifies requirements for two-component ultra high-build paints for the protection of iron and steel against exterior corrosion in aggressive service conditions. They are suitable for application only by using high pressure, high volume airless spray equipment. Paints specified in this Standard comply with the requirements of Paint type C34 in AS/NZS 2312. These paints are produced in a limited colour range, usually white, grey or black.

Ultra high-build (UHB) paints are classified as follows:

- (a) Type I, two-pack epoxy.
- (b) Type II, polyester.
- (c) Type III, vinyl ester.

Ultra high-build paints are not intended to provide an aesthetically pleasing finish, but should provide long-term protection in aggressive atmospheric exposures for periods in excess of 15 years.

NOTES:

- 1 These paints may be used as detailed for system EPF1, in AS/NZS 2312.
- 2 Appendix A contains recommendations which should be provided by the purchaser at the time of enquiry or order.
- 3 Additional information on the use and application of ultra high-build paints is contained in Appendix B.

1.2 REFERENCED DOCUMENTS

A list of the documents referred to in this Standard is contained in Appendix C.

1.3 DEFINITIONS

For the purpose of this Standard, the definitions given in AS/NZS 2310 and those below apply.

1.3.1 Gel time

The time taken from the initial mixing of the two components of an ultra high-build paint, for the material to reach the incipient gelled state at a constant temperature. The gel point is characterized by a sudden pronounced increase in viscosity of the material.