AS 4848.1:2019

Australian STANDARD

Application specifications for coating systems

Part 1: Single coat inorganic (ethyl) zinc silicate — Solvent-borne

STANDARDS Australia

AS 4848.1:2019

This Australian Standard® was prepared by CH-003, Paints And Related Materials. It was approved on behalf of the Council of Standards Australia on 2 April 2019.

This Standard was published on 1 May 2019.

The following are represented on Committee CH-003:

Australian Institute of Building
Australian Corrosion Association
Master Painters Austalia
Australian Paint Manufacturers Federation
National Association of Testing Authorities Australia
Australian Wall and Ceiling Association
Surface Coatings Association Australia
National Painting and Decorating Institute

This Standard was issued in draft form for comment as DR AS 4848.1:2018.

Keeping Standards up-to-date

Ensure you have the latest versions of our publications and keep up-to-date about Amendments, Rulings, Withdrawals, and new projects by visiting:
www.standards.org.au

ISBN 978 1 76072 436 8

Australian STANDARD

Application specifications for coating systems

Part 1: Single coat inorganic (ethyl) zinc silicate — Solvent-borne

First published as AS 4848.1—2006.
Revised and republished as AS 4848.1:2019.

COPYRIGHT

© Standards Australia Limited 2019

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 (Cth).

Preface

This Standard was prepared by the Australian members of the Joint Standards Australia/New Zealand Committee CH-003, Paints and Related Materials, to supersede AS 4848.1—2006.

After consultation with stakeholders in both countries, Standards Australia and Standards New Zealand decided to develop this Standard as an Australian Standard rather than an Australian/New Zealand Standard.

The objective of this Standard is to specify the requirements for single-coat ethyl zinc silicate coatings applied to fabricated ferrous products.

This revision of AS 4848.1 replaces the single coating system in the original standard with the three solvent borne systems from AS 2312.1, *Guide to the protection of structural steel against atmospheric corrosion by the use of protective coatings, Part 1: Paint coatings*. The surface preparation, application and inspection sections have been completely revised and other corrections and additions made. An informative appendix has been added to provide purchaser guidelines.

The term "informative" is used to define the application of the appendix to which it applies. An "informative" appendix is for information and guidance only.

© Standards Australia Limited 2019

Contents

Preface ii
Introduction iv
1 Scope 1
2 Normative references 1
3 Terms and definitions 1
4 Selection of coating system 2
5 Selection of coating material 2
6 Preliminary activities 3
7 Surface preparation 3
8 Application of coating 4
9 Repair of defective or damaged coating 4
10 Handling and transport of coated items 4
11 Quality assurance 5
Appendix A (informative) **Purchasing guidelines** 6
Bibliography 7

Introduction

For inorganic zinc silicate paints to perform to their optimum level of substrate protection, it is necessary to control all aspects of their application and use from product selection to correct surface preparation and ongoing maintenance. Failure to control these aspects may lead to premature failure and associated high maintenance or asset replacement costs.

Solvent-borne inorganic (ethyl) zinc silicate coatings can be used in a variety of coating systems for the protection of steel against corrosion, as single-coat systems or as a primer in combination with other coatings. Factors relating to surface preparation, surface profile, method of application and applied paint thickness can be tailored to suit particular purposes, and where project parameters warrant it, specific advice should be sought from coating manufacturers or expert consultants.

© Standards Australia Limited 2019

Australian Standard®

Application specifications for coating systems

Part 1: Single coat inorganic (ethyl) zinc silicate—Solvent-borne

1 Scope

This Standard specifies requirements for solvent-borne inorganic zinc silicate coating systems. It covers selection of coating material, surface preparation, application and quality assurance for fabricated ferrous individual articles and assembled structures.

NOTE Purchasing guidelines for coating activity contracts are also set out in Appendix A.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document:

NOTE Documents for informative purposes are listed in the Bibliography.

AS 1627.1, *Metal finishing — Preparation and pretreatment of surfaces, Part 1: Removal of oil, grease and related contamination*

AS 1627.4, *Metal finishing — Preparation and pretreatment of surfaces, Part 4: Abrasive blast cleaning of steel*

AS 3894.3, *Site testing of protective coatings, Method 3: Determination of dry film thickness*

AS 3894.4, *Site testing of protective coatings, Method 4: Assessment of degree of cure*

AS 3894.5, *Site testing of protective coatings, Method 5: Determination of surface profile*

AS 3894.10, *Site testing of protective coatings, Part 10: Inspection report — Daily surface and ambient conditions*

AS 3894.11, *Site testing of protective coatings, Part 11: Equipment report*

AS 3894.12, *Site testing of protective coatings, Part 12: Inspection report — Coating*

AS 3894.13, *Site testing of protective coatings, Part 13: Inspection report — Daily*

AS 3894.14, *Site testing of protective coatings, Part 14: Inspection report — Daily Painting*

AS/NZS 2310, *Glossary of paint and painting terms*

AS/NZS 3750.15, *Paints for steel structures, Part 15: Inorganic zinc silicate paint*

3 Terms and definitions

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

3.1
coating system
single-coat, solvent-borne, inorganic (ethyl) zinc silicate

3.2
competent person
person who has, through a combination of training, education and experience, acquired knowledge and skills enabling that person to correctly perform a specific task

© Standards Australia Limited 2019