

Australian Standard™

Application specifications for coating systems

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



This Australian Standard was prepared by Committee CH-003, Paints And Related Materials. It was approved on behalf of the Council of Standards Australia on 8 March 2006.
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The following are represented on Committee CH-003:

Australasian Corrosion Association
Australasian Railway Association
Australian Paint Approval Scheme
Australian Paint Manufacturers' Federation
Business New Zealand
Institution of Professional Engineers New Zealand
Master Painters Australia
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PREFACE

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

This Standard is the first part of a new series of Standards dealing with the application of coating systems and covers surface preparation, application, quality control, inspection methods and health and safety on fabricated ferrous articles in structures.

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FOREWORD

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 cost.

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

Australian Standard

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1 SCOPE

This Standard applies to inorganic zinc silicate coating systems and covers surface preparation, application, quality control inspection methods, health and safety on fabricated ferrous individual articles and assembled structures.

2 REFERENCED DOCUMENTS

The following documents are referred to in this Standard:

AS

1627	Metal finishing—Preparation and pretreatment of surfaces
1627.1	Part 1: Removal of oil, grease and related contamination
1627.4	Part 4: Abrasive blast cleaning of steel
1627.9	Part 9: Pictorial surface preparation standards for painting steel surfaces

1580	Paints and related materials – Methods of test
1580.102.1	Method 102.1: Sampling procedure
1580.108.2	Method 108.2: Dry film thickness—Paint inspection gauge
1580.408.2	Method 408.2: Adhesion—Knife test
1580.408.4	Method 408.4: Adhesion (crosscut)

3894	Site testing of protective coatings
3894.3	Method 3: Determination of dry film thickness
3894.4	Method 4: Assessment of degree of cure
3894.5	Method 5: Determination of surface profile
3894.10	Part 10: Inspection report—Daily surface and ambient conditions
3894.11	Part 11: Equipment report
3894.12	Part 12: Inspection report—Coating

AS/NZS

2310	Glossary of paint and painting terms
2312:2002	Guide to the protection of structural steel against atmospheric corrosion by the use of protective coatings
3750	Paints for steel structures
3750.15:1998	Part 15: Inorganic zinc silicate paint

3 DEFINITIONS

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

3.1 Applicator

A qualified painting contractor, engaged to prepare the surface and apply the coating according to this Standard.