ISO 14713-1:2009-12 (E)

Zinc coatings - Guidelines and recommendations for the protection against corrosion of iron and steel in structures - Part 1: General principles of design and corrosion resistance

Contents

Page

Foreword iv

1 Scope 1

2 Normative references 1

3 Terms and definitions 2

4 Materials 3
4.1 Iron and steel substrates 3
4.2 Zinc coatings 3

5 Selection of zinc coating 3

6 Design requirements 4
6.1 General principles of design to avoid corrosion 4
6.2 Design for application of different zinc coating processes 5
6.3 Tubes and hollow sections 5
6.4 Connections 5
6.5 Duplex systems 6
6.6 Maintenance 7

7 Corrosion in different environments 7
7.1 Atmospheric exposure 7
7.2 Exposure to soils 10
7.3 Exposure to water 12
7.4 Abrasion 12
7.5 Exposure to chemicals 12
7.6 Elevated temperatures 13
7.7 Contact with concrete 13
7.8 Contact with wood 14
7.9 Bimetallic contact 14

8 Accelerated test methods applied to zinc coatings 16

Bibliography 17