

# 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

---

<b>Contents</b>		<b>Page</b>
Foreword .....		iv
<b>1</b>	<b>Scope .....</b>	<b>1</b>
<b>2</b>	<b>Normative references .....</b>	<b>1</b>
<b>3</b>	<b>Terms and definitions .....</b>	<b>2</b>
<b>4</b>	<b>Materials .....</b>	<b>3</b>
<b>4.1</b>	<b>Iron and steel substrates .....</b>	<b>3</b>
<b>4.2</b>	<b>Zinc coatings .....</b>	<b>3</b>
<b>5</b>	<b>Selection of zinc coating .....</b>	<b>3</b>
<b>6</b>	<b>Design requirements .....</b>	<b>4</b>
<b>6.1</b>	<b>General principles of design to avoid corrosion .....</b>	<b>4</b>
<b>6.2</b>	<b>Design for application of different zinc coating processes .....</b>	<b>5</b>
<b>6.3</b>	<b>Tubes and hollow sections .....</b>	<b>5</b>
<b>6.4</b>	<b>Connections .....</b>	<b>5</b>
<b>6.5</b>	<b>Duplex systems .....</b>	<b>6</b>
<b>6.6</b>	<b>Maintenance .....</b>	<b>7</b>
<b>7</b>	<b>Corrosion in different environments .....</b>	<b>7</b>
<b>7.1</b>	<b>Atmospheric exposure .....</b>	<b>7</b>
<b>7.2</b>	<b>Exposure to soils .....</b>	<b>10</b>
<b>7.3</b>	<b>Exposure to water .....</b>	<b>12</b>
<b>7.4</b>	<b>Abrasion .....</b>	<b>12</b>
<b>7.5</b>	<b>Exposure to chemicals .....</b>	<b>12</b>
<b>7.6</b>	<b>Elevated temperatures .....</b>	<b>13</b>
<b>7.7</b>	<b>Contact with concrete .....</b>	<b>13</b>
<b>7.8</b>	<b>Contact with wood .....</b>	<b>14</b>
<b>7.9</b>	<b>Bimetallic contact .....</b>	<b>14</b>
<b>8</b>	<b>Accelerated test methods applied to zinc coatings .....</b>	<b>16</b>
Bibliography .....		17