



ALUMINIUM FINISHING ASSOCIATION

## **British, European and International Standards**

### **Quality Systems**

BS EN ISO 9001 - Quality Management Systems. Requirements

This internationally recognised Quality Management System is held by all AFA members.

### **Aluminium Alloys**

BS EN 485 – Aluminium & aluminium alloys: Plate, sheet and strip. Conditions for delivery, properties and tolerances.

BS EN 515 - Aluminium & aluminium alloys: Wrought products, temper designations.

BS EN 573 - Aluminium & aluminium alloys: Chemical composition, form of wrought products.

BS EN 755 - Aluminium & aluminium alloys: Extruded bar, rod, tube and profiles. Conditions for delivery, properties, and tolerances.

### **Paint & Powder Coating**

BS 6496 (1984) - Specification for powder organic coatings for application and stoving to aluminium alloy extrusions, sheet and pre-formed sections for external architectural purposes, and for the finish on aluminium alloy extrusions, sheet and preformed sections coated with powder organic coatings.

Covers the requirements for coatings before and after their application. It also specifies the pretreatment of the aluminium alloys.

BS EN 12206 - Paints and varnishes. Coating of aluminium and aluminium alloys for architectural purposes.

Part 1: Coatings prepared from coating powder. Specifies requirements and the corresponding methods of test relating to organic coating of aluminium and aluminium alloy extrusions, sheet and pre-formed sections for architectural purposes, using exclusively powder coating materials.

BS 4842 (1984) - Specification for liquid organic coatings for application to aluminium alloy extrusions, sheet and preformed sections for external architectural purposes, and for the finish on aluminium alloy extrusions, sheet and preformed sections coated with liquid organic coatings

BS 3900 – Methods of test for paints

BS EN ISO 2360 - Non-conductive coatings on non-magnetic electrically conductive basis materials. Measurement of coating thickness. Amplitude-sensitive eddy current method.

BS EN 12487 - Corrosion protection of metals. Rinsed and non-rinsed chromate conversion coatings on aluminium and aluminium alloys

## **Anodising**

These current BS EN ISO standards have replaced the former BS EN 12373, parts 1 – 19. The number denotes the part number of the old standard.

1. BS EN ISO 7599 - Anodizing of aluminium and its alloys. General specifications for anodic oxidation coatings on aluminium
2. BS EN ISO 2106 - Anodizing of aluminium and its alloys. Determination of mass per unit area (surface density) of anodic oxidation coatings. Gravimetric method
3. BS EN ISO 2128 - Anodizing of aluminium and its alloys. Determination of thickness of anodic oxidation coatings. Non-destructive measurement by split-beam microscope
4. BS EN ISO 2143 - Anodizing of aluminium and its alloys. Estimation of loss of absorptive power of anodic oxidation coatings after sealing. Dye-spot test with prior acid treatment CD-ROM
5. BS EN ISO 2931 - Anodizing of aluminium and its alloys. Assessment of quality of sealed anodic oxidation coatings by measurement of admittance
6. BS EN ISO 3210 - Anodizing of aluminium and its alloys. Assessment of quality of sealed anodic oxidation coatings by measurement of the loss of mass after immersion in phosphoric acid/chromic acid solution
7. BS EN ISO 3210 - As above - two parts replaced by one new standard.
8. BS EN ISO 6581 - Anodizing of aluminium and its alloys. Determination of the comparative fastness to ultraviolet light and heat of coloured anodic oxidation coatings
9. BS EN ISO 8251 - Anodizing of aluminium and its alloys. Measurement of abrasion resistance of anodic oxidation coatings
10. BS EN ISO 8251 - As above - two parts replaced by one new standard.
11. BS EN ISO 7668 - Anodizing of aluminium and its alloys. Measurement of specular reflectance and specular gloss of anodic oxidation coatings at angles of 20 degrees, 45 degrees, 60 degrees or 85 degrees
12. BS EN ISO 6719 - Anodizing of aluminium and its alloys. Measurement of reflectance characteristics of aluminium surfaces using integrating-sphere instruments
13. BS EN ISO 7759 - Anodizing of aluminium and its alloys. Measurement of reflectance characteristics of aluminium surfaces using a goniophotometer or an abridged goniophotometer
14. BS EN ISO 10215 - Anodizing of aluminium and its alloys. Visual determination of image clarity of anodic oxidation coatings. Chart scale method
15. BS EN ISO 3211 - Anodizing of aluminium and its alloys. Assessment of resistance of anodic oxidation coatings to cracking by deformation
16. BS EN ISO 2085 - Anodizing of aluminium and its alloys. Check for continuity of thin anodic oxidation coatings. Copper sulfate test
17. BS EN ISO 2376 - Anodizing of aluminium and its alloys. Determination of electric breakdown potential

18. BS EN ISO 8993 - Anodizing of aluminium and its alloys. Rating system for the evaluation of pitting corrosion. Chart method

19. BS EN ISO 8994 - Anodizing of aluminium and its alloys. Rating system for the evaluation of pitting corrosion. Grid method

BS 6161 - Methods of test for anodic oxidation coatings on aluminium and its alloys  
Mostly replaced by above, but parts 11, 14, 18 (abrasion resistance & reflectance) are still current.

BS EN 1463 - Metallic and oxide coatings. Measurement of coating thickness. Microscopical method

BS EN ISO 2360 - Non-conductive coatings on non-magnetic electrically conductive basis materials. Measurement of coating thickness. Amplitude-sensitive eddy current method.

### **Colour**

BS 4800 Schedule of paint colours for building purposes  
RAL - the main European system for standardising colours.

### **Design**

BS 4479 - Design of articles that are to be coated. (In 9 parts)  
Part 1 General recommendations  
Part 3 Recommendations for conversion coatings  
Part 4 Recommendations for paint coatings and varnish coatings  
Part 5 Recommendations for anodic oxidation coatings

### **Other**

BS 4873 Aluminium alloy windows and doorsets. Specification

BS 4868 - Specification for profiled aluminium sheet for building

BS 1161 – Aluminium alloy sections