AS 1231—2000
Reconfirmed 2017

Australian Standard™

Aluminium and aluminium alloys—Anodic oxidation coatings

Standards Australia

This Australian Standard was prepared by Committee MT/9, Metal Finishing. It was approved on behalf of the Council of Standards Australia on 16 June 2000 and published on 19 July 2000.

The following interests are represented on Committee MT/9:

Australasian Institute of Metal Finishing

Australian Chamber of Commerce and Industry

Australian Industry Group

Department of Defence (Australia)

Galvanising Association of New Zealand

Galvanizers Association of Australia

Institute of Materials Engineering Australasia

Powder Coaters Association

Royal Australian Chemical Institute

Society of Automotive Engineers, Australasia

Telstra Corporation

Additional interests participating in the preparation of this Standard:

Aluminium fabricators

Anodisers

Australian Window Association

Technical publishers

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We also welcome suggestions for improvement in our Standards, and especially encourage readers to notify us immediately of any apparent inaccuracies or ambiguities. Contact us via email at mail@standards.com.au, or write to the Chief Executive, Standards Australia International Ltd, PO Box 1055, Strathfield, NSW 2135.

This Standard was issued in draft form for comment as DR 99260.

STANDARDS AUSTRALIA

RECONFIRMATION
OF
AS 1231—2000
Aluminium and aluminium alloys—Anodic oxidation coatings

RECONFIRMATION NOTICE

Technical Committee MT-009 has reviewed the content of this publication and in accordance with Standards Australia procedures for reconfirmation, it has been determined that the publication is still valid and does not require change.

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Approved for reconfirmation in accordance with Standards Australia procedures for reconfirmation on 20 March 2017.

The following are represented on Technical Committee MT-009:

Australasian Institute of Surface Finishing
Australian Chamber of Commerce and Industry
Australian Industry Group
Australian Steel Institute
Bureau of Steel Manufacturers of Australia
Galvanizers Association of Australia
Galvanizing Association of New Zealand
New Zealand Metal Roofing Manufacturers

NOTES

Australian Standard™

Aluminium and aluminium alloys—Anodic oxidation coatings

Originated as AS K150—1963.
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PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee MT/9, Metal Finishing, to supersede AS 1231—1985, *Aluminium and aluminium alloys—Anodised coatings for architectural applications* and AS 1956—1976, *Anodic oxidation coatings on aluminium for decorative and automotive applications*.

These two Standards have been combined because of the similarity of their technical content. During this revision cognizance was taken of the following International (ISO), British and American Standards:

ISO
7599:1983 Anodizing of aluminium and its alloys—General specifications for anodic oxide coatings on aluminium.

BS
1615:1987 Anodic oxidation coatings on aluminium and its alloys.

3987:1991 Anodic oxidation coatings on wrought aluminium for external architectural applications.

ASTM
B 580-79 Specification for anodic oxide coatings on aluminium

This Standard is based primarily on BS 1615 which is considered by Committee MT/9 as the most appropriate and most up-to-date of the four Standards listed.

This Standard is the result of a consensus among the representatives on the Joint Committee to produce it as an Australian Standard.

The term ‘informative’ has been used in this Standard to define the application of the appendix to which it applies. An ‘informative’ appendix is only for information and guidance.

CONTENTS

STANDARDS AUSTRALIA

Australian Standard
Aluminium and aluminium alloys — Anodic oxidation coatings

1 SCOPE

This Standard specifies requirements for anodic oxidation coatings on aluminium and its alloys for general applications and for external architectural applications.

This Standard is not applicable to—

(a) non-porous anodic oxidation coatings of the barrier-layer type;

(b) coatings produced by chromic acid anodising;

(c) hard anodic oxidation coatings that are used mainly for engineering purposes and that have abrasion and wear resistance as their primary characteristics; and

(d) anodic oxidation coatings intended merely to prepare a substrate for subsequent application of organic coatings or the electrodeposition of metals.

NOTES:

1 The coatings covered by this Standard consist mainly of aluminium oxide and are produced by an electrolytic oxidation process during which the aluminium acts as the anode.

2 Advice and recommendations on information to be supplied by the purchaser at the time of enquiry or order are given in Appendix A.

3 Although not specified, the quality and composition of aluminium or aluminium alloys should be suitable for anodising. (See Appendix B).

4 Information on maintenance of coatings is given in Appendix C.

5 Advice on handling and temporary protection of anodised products during transportation and installation is given in Appendix D.

Details of wrought aluminium and aluminium-alloy product types are given in the following Standards:

(i) Sheet and plate ..... AS/NZS 1734.

(ii) Drawn wire, rod, bar and strip ..... AS/NZS 1865.

(iii) Extruded rod, bar, solid and hollow shapes ..... AS/NZS 1866.

(iv) Drawn tubes ..... AS/NZS 1867.

2 REFERENCED DOCUMENTS

The following documents are referred to in this Standard:

AS

1199 Sampling procedures and tables for inspection by attributes

1399 Guide to AS 1199—Sampling procedures and tables for inspection by attributes

1874 Aluminium and aluminium alloys—Ingots and castings

2331 Methods of test for metallic and related coatings

2331.3.3 Method 3.3: Corrosion and related property tests—Copper accelerated acetic acid salt spray (CASS) test

