

Australian Standard™

**Metal finishing—Thermoset powder
coatings for architectural applications of
aluminium and aluminium alloys**

This Australian Standard was prepared by Committee MT-009, Metal Finishing. It was approved on behalf of the Council of Standards Australia on 14 June 2002 and published on 27 June 2002.

The following are represented on Committee MT-009:

Australasian Institute of Metal Finishing
Australian Chamber of Commerce and Industry
Australian Industry Group
Australian Paint Manufacturers' Federation
Department of Defence (Australia)
Galvanising Association of New Zealand
Institute of Materials Engineering Australasia
New Zealand Abrasive Blasting Association
Powder Coaters Association
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STANDARDS AUSTRALIA

RECONFIRMATION

OF

AS 3715—2002

Metal finishing—Thermoset powder coatings for architectural applications of aluminium and aluminium alloys

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NOTES

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PREFACE

This Standard was prepared by the Australian members of the Joint Standards Australia/Standards New Zealand Committee MT-009, Metal Finishing, at the request of industry to supersede AS 3715—1989. After consultation with stakeholders in both countries, Standards Australia and Standards New Zealand decided to develop this Standard as an Australian rather than Australian/New Zealand Standard.

In developing this Standard, cognizance was taken of the following documents issued by the Architectural Aluminium Manufacturers Association (US):

- AAMA 2603 Voluntary performance requirements and test procedures for pigmented organic coatings on extruded aluminium
- AAMA 2604 Voluntary specification for high performance organic coatings on architectural extrusions and panels

The objective of this Standard is to list the testing procedures and specify performance requirements for thermoset powder coatings applied to aluminium and aluminium alloy substrates intended for architectural applications.

The requirements of this Standard are compatible with the quality plan and the quality assurance requirements contained in the AIMF Qualicoat Specification, *Specification for a quality label for paint, lacquer and powder coatings on aluminium for architectural applications*. The licensing body for this specification is the Australasian Institute of Metal Finishing (AIMF). Details on how to obtain an AIMF Qualicoat licence can be obtained through this Institute. It is recommended that powder applicators are audited by an accredited third party organization to verify compliance with this Standard in the interest of best practice.

In addition, the following British Standard was reviewed, and its tests for resistance to mortar and permeability of coating were noted.

- BS 6496 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 pre-formed sections coated with powder organic coatings

There are no International (ISO) Standards on this subject. Statements expressed in mandatory terms in Notes to Tables and Figures are deemed to be requirements of this Standard.

The terms 'normative' and 'informative' have been used in this Standard to define the application of the appendix to which they apply. A 'normative' appendix is an integral part of a Standard, whereas an 'informative' appendix is only for information and guidance.

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STANDARDS AUSTRALIA

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SECTION 1 SCOPE AND GENERAL

1.1 SCOPE

This Standard sets out test procedures and specifies performance requirements for thermoset powder coatings applied to aluminium and aluminium-alloy substrates intended for architectural applications.

This Standard applies only to thermoset powder coatings for exterior architectural uses.

NOTES:

- 1 Appendix A contains advice and recommendations on information which should be supplied by the purchaser at the time of enquiry or order.
- 2 Information on weathering performance of powder-coated aluminium products is given in Appendix B.
- 3 Information on maintenance and repair of coating is given in Appendix C.
- 4 Advice on handling and temporary protection during transportation and installation is given in Appendix D.

1.2 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
1580	Paints and related materials—Methods of test
1580.408.4	Method 408.4: Adhesion (cross-cut)
1580.481.3	Method 481.3: Corrosion—Exposed to weathering—Degree of corrosion of coated metal substrates
1580.483.1	Method 483.1: Resistance to artificial weathering (carbon-arc type instruments)
1625	Methods of test for pressure-sensitive adhesive tape
1625.3	Method 3.1: Adhesion strength
1672	Limes and limestones
1672.1	Part 1: Limes for building
1745	Outdoor weathering of plastics in the Australian environment
1745.1	Part 1: Commercial products
2331	Method of test for metallic and relating coatings
2331.1.4	Method 1.4: Local thickness tests—Magnetic induction and eddy current
2331.3.2	Method 3.2: Corrosion and related property tests—Acetic acid salt spray test (ASS test)