



BSI Standards Publication

**Guidelines for the selection of coating types, tests
and methods of assessing the performance of
coated aluminium in architectural applications**

National foreword

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Guidelines for the selection of coating types, tests and methods of assessing the performance of coated aluminium in architectural applications

Lignes directrices pour la sélection des types de revêtements, essais et méthodes d'évaluation des performances de l'aluminium revêtu dans les applications architecturales





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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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For an explanation on the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 79, *Light metals and their alloys*, Subcommittee SC 2, *Organic and anodic oxidation coatings on aluminium*.

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Guidelines for the selection of coating types, tests and methods of assessing the performance of coated aluminium in architectural applications

1 Scope

This document establishes a system to select coating types for architectural applications, depending on environment. It gives guidelines for the selection of tests and methods of measuring performance in terms that are of direct interest to the building designer.

This document is applicable to organic and anodic oxidation (AAO) coatings on aluminium, including those produced from liquid and powder paints, and combined coatings of organic and anodic oxidation coatings. It is designed to be applicable to novel coatings developed in the future.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 7583, *Anodizing of aluminium and its alloys — Terms and definitions*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 7583 and the following apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <http://www.iso.org/obp>

3.1

abrasive wear

wear process of a material caused by cutting or scratching actions of hard bodies or hard particles

[SOURCE: ISO 4378-2:2017, 3.3.1.2]

3.2

adhesive wear

wear process due to adhesion and extraction of material out of the body surface

[SOURCE: ISO 4378-2:2017, 3.3.1.3]

3.3

accelerated test

test undertaken under conditions designed to speed material deterioration

[SOURCE: ISO 23936-2:2011, 3.1.1]

3.4

architectural applications

external and internal building applications for coated aluminium products where both appearance and long life are important