

BSI Standards Publication

Roofing and cladding products from metal sheet - Specification for fully supported products of aluminium sheet



BS EN 507:2019 BRITISH STANDARD

National foreword

This British Standard is the UK implementation of EN 507:2019. It supersedes BS EN 507:2000, which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee B/542/5, Sheet roof and wall coverings.

A list of organizations represented on this committee can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

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English Version

Roofing and cladding products from metal sheet -Specification for fully supported products of aluminium sheet

Produits de couverture et bardage en tôle métallique -Spécification pour les produits de couverture en tôle d'aluminium totalement supportés Dachdeckungs- und Wandbekleidungselemente aus Metallblech - Festlegungen für vollflächig unterstützte Bedachungselemente aus Aluminiumblech

This European Standard was approved by CEN on 26 May 2019.

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EUROPEAN COMMITTEE FOR STANDARDIZATION COMITÉ EUROPÉEN DE NORMALISATION EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

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European foreword

This document (EN 507:2019) has been prepared by Technical Committee CEN/TC 128 "Roof covering products for discontinuous laying and products for wall cladding", the secretariat of which is held by NBN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest byFebruary 2020, and conflicting national standards shall be withdrawn at the latest by February 2020.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 507:1999.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association.

In comparison to the previous edition following technical changes were made:

- scope of the standard has been extended to cladding products;
- reference has been added to anodised aluminium sheets;
- list aluminium alloys suitable without further proof provided their properties conform to the values given in the respective material standards (EN 485 or EN 1396) as well as concerning organic coatings suitable for application to aluminium substrates within the scope of this standard have been changed;
- Annex A concerning the national A-deviations was deleted.

These changes or additions can be found in the following Clauses and subclauses: 1; 2; 3.1.2; 3.1.3; 3.1.5; 3.1.6; 3.1.7; 3.2; 4.1; 4.2.1; 4.2.2; 4.2.3; 4.3.3; 5.1; 5.2.1; 5.2.2.2 and 7.3.

According to the CEN-CENELEC Internal Regulations, the national standards organisations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Introduction

Figure 1 indicates the position of this standard in the CEN framework of standards concerning roofing and cladding products of metal sheet.

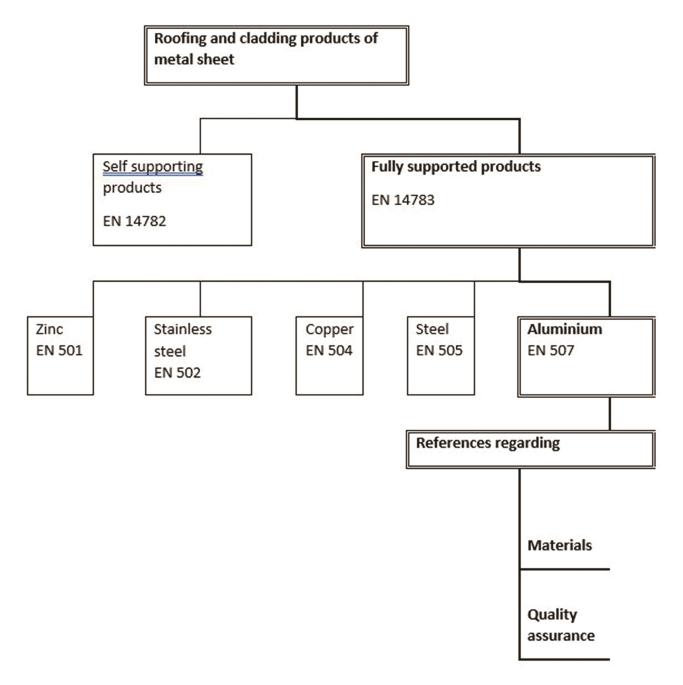


Figure 1 — Framework of standards

In this standard the performance of the product has been defined in terms of a number of type tests.

The performance of a roof or cladding constructed with these products depends not only on the properties of the product as it is required by this document, but also on the design, construction and performance of the roof or the cladding as a whole in relation to the environment and conditions of use.

Metallic coated aluminium sheet can be easily fabricated. It can be sheared, punched, pressed, drawn, folded, roll-formed without difficulty within the given limits of the properties listed in the respective material specifications.

Coil coated sheet can be fabricated like metallic coated aluminium sheet in most applications, but minimum bend radius, design of forming tools, process temperature, etc. are chosen according to material properties.

1 Scope

This document specifies requirements for roofing and cladding products used for assembly into coverings for wall claddings, linings and pitched roofs, made from aluminium sheet with or without additional surface treatment (organic coating or anodising).

This document establishes general characteristics, definitions and labelling of the products, together with requirements for the materials from which the products can be manufactured. It is intended to be used either by manufacturers to ensure that their products comply with the requirements or by purchasers to verify that the products comply before they are despatched from the factory. It specifies the requirements for products which enable them to meet all normal service conditions. Products can be prefabricated or semi-formed products as well as strip, coil and sheet for on-site-formed applications (e.g. standing seam roofs).

This document applies to all discontinuously laid and fully supported roofing and cladding products made of aluminium sheets. No requirements for supporting construction, design of roof system and execution of connections and flashings are included.

This document does not apply to self-supporting aluminium sheets that are covered by EN 508-2.

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.

EN 485-1, Aluminium and aluminium alloys — Sheet, strip and plate — Part 1: Technical conditions for inspection and delivery

EN 485-2, Aluminium and aluminium alloys — Sheet, strip and plate — Part 2: Mechanical properties

EN 485-4, Aluminium and aluminium alloys — Sheet, strip and plate — Part 4: Tolerances on shape and dimensions for cold-rolled products

EN 508-2, Roofing products from metal sheet — Specification for self-supporting products of steel, aluminium or stainless steel sheet — Part 2: Aluminium

EN 1396, Aluminium and aluminium alloys — Coil coated sheet and strip for general applications — Specifications

EN 10204, Metallic products — Types of inspection documents

EN ISO 7599, Anodizing of aluminium and its alloys — Method for specifying decorative and protective anodic oxidation coatings on aluminium (ISO 7599)

3 Terms, definitions, symbols and abbreviations

3.1 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 485-1 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