



NSAI
Standards

Irish Standard
I.S. EN 508-1:2021

Roofing and cladding products from metal sheet - Specification for self-supporting products of steel, aluminium or stainless steel sheet - Part 1: Steel

I.S. EN 508-1:2021

Incorporating amendments/corrigenda/National Annexes issued since publication:

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National Foreword

I.S. EN 508-1:2021 is the adopted Irish version of the European Document EN 508-1:2021, Roofing and cladding products from metal sheet - Specification for self-supporting products of steel, aluminium or stainless steel sheet - Part 1: Steel

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EUROPEAN STANDARD

EN 508-1

NORME EUROPÉENNE

EUROPÄISCHE NORM

October 2021

ICS 91.060.20

Supersedes EN 508-1:2014

English Version

Roofing and cladding products from metal sheet - Specification for self-supporting products of steel, aluminium or stainless steel sheet - Part 1: Steel

Produits de couverture et de bardage en tôle
métallique - Spécification pour les produits
autoportants en tôle d'acier, d'aluminium ou d'acier
inoxydable - Partie 1 : Acier

Dachdeckungs- und Wandbekleidungsprodukte aus
Metallblech - Spezifikation für selbsttragende
Dachdeckungsprodukte aus Stahlblech,
Aluminiumblech oder nichtrostendem Stahlblech - Teil
1: Stahl

This European Standard was approved by CEN on 21 June 2021.

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This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of 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 United Kingdom.



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

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

EN 508-1:2021 (E)

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European foreword

This document (EN 508-1:2021) 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 by April 2022, and conflicting national standards shall be withdrawn at the latest by April 2022.

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 508-1:2014.

In comparison with EN 508-1:2014 the following technical changes have been made:

- the scope of the document has been extended to include cladding products;
- a reference has been added to ZM (hot dip zinc-magnesium) coating;
- the reference AZ with organic coating has been deleted;
- a bending requirement has been added;
- three grades have been added 390, 420 and 450;
- minimum nominal coating masses have been added for exterior applications;
- clarification of the tolerances about liner tray.

These changes or additions can be found in the following Clauses and subclauses: Clause 1; 3.2.4; 3.2.6; 3.2.7; 3.5; 4.1; 4.2.1; 4.2.2; 4.2.3; 4.3.3.1 and Annex C.

EN 508, *Roofing and cladding products from metal sheet - Specification for self-supporting products of steel, aluminium or stainless steel sheet* consists of the following parts:

- *Part 1: Steel;*
- *Part 2: Aluminium;*
- *Part 3: Stainless steel.*

Any feedback and questions on this document should be directed to the users' national standards body. A complete listing of these bodies can be found on the CEN website.

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.

EN 508-1:2021 (E)

Introduction

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

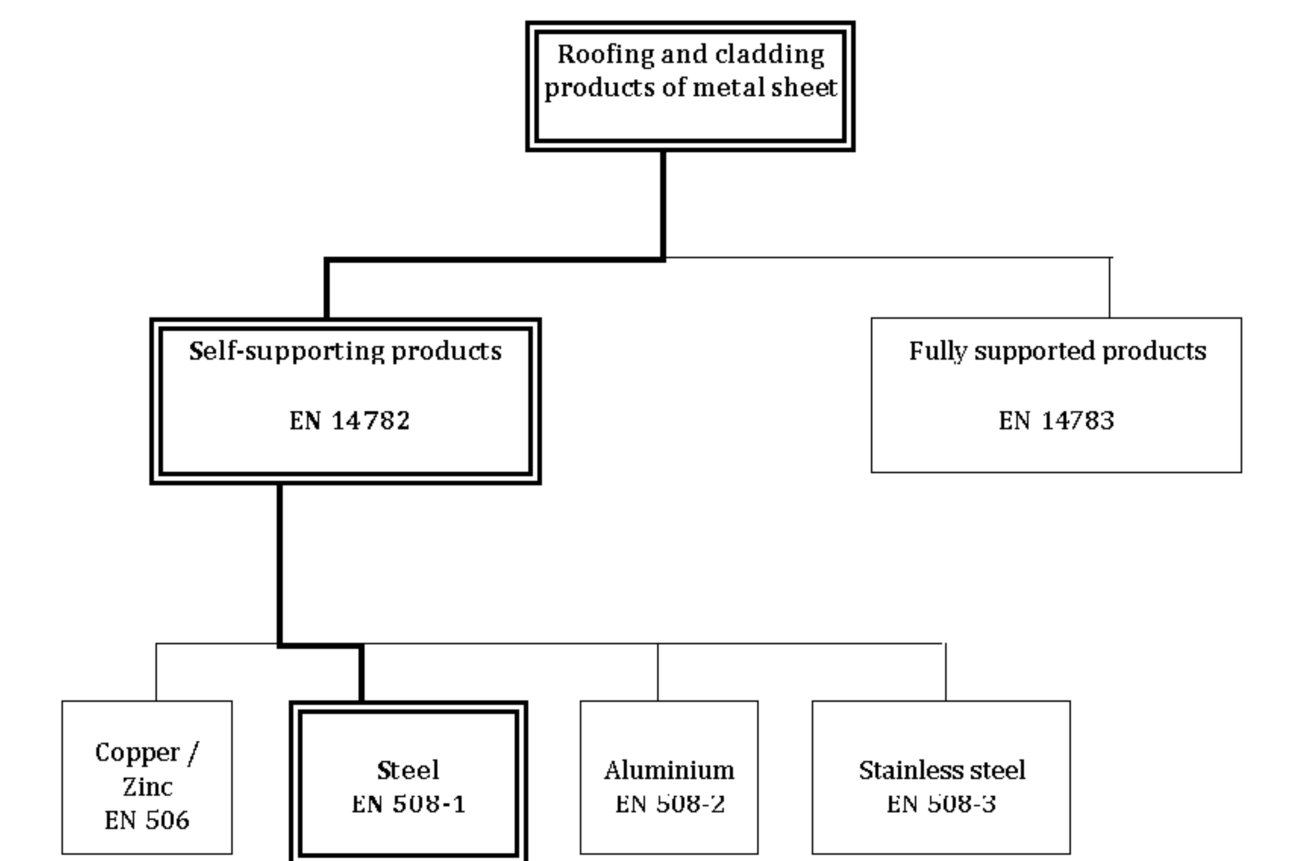


Figure 1 — Framework of standards

In this document, the performance of the product has been defined in terms of calculation and a number of type tests.

The performance of a roof or of the cladding constructed with these products depends not only on the properties of the product as 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.

1 Scope

This part of EN 508 specifies requirements for self-supporting roofing, covering, wall cladding, lining, liner tray and tile products for discontinuous laying made from metallic coated steel sheet with or without additional organic coatings. Sheets intended to be used with insulation and membranes are also covered.

This document establishes general characteristics, definitions, classifications and labelling for 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 when purchased before they are dispatched from the factory. It specifies the requirements for products which enable them to meet all normal service conditions.

This document applies to all discontinuously laid self-supporting external profiled sheets for roofing covering, wall cladding, lining, and liner trays, with the exception of tiles with a surface area less than 1 m² and produced by stamping. These profiled sheets are designed to keep wind, rain and snow out of the building and to transfer any resultant loads and infrequent maintenance loads to the structure.

This document does not cover products for structural purposes, i.e. it does cover products used in constructions of structural Class III (according to EN 1993-1-3), it does not cover products used in constructions of structural Classes I and II (according to EN 1993-1-3) intended to contribute to the global or partial stability of the building structure by providing racking resistance or resistance to permanent static loads (excluding self-weight of the metal sheet).

No requirements for supporting construction, design of roof, cladding, lining, tile system and execution of connections and flashings are included.

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 1427, *Bitumen and bituminous binders - Determination of the softening point - Ring and Ball method*

EN 10143, *Continuously hot-dip coated steel sheet and strip - Tolerances on dimensions and shape*

EN 10169:2010+A1:2012, *Continuously organic coated (coil coated) steel flat products - Technical delivery conditions*

EN 10346, *Continuously hot-dip coated steel flat products for cold forming - Technical delivery conditions*

EN 14782, *Self-supporting metal sheet for roofing, external cladding and internal lining - Product specification and requirements*

EN ISO 6270-1, *Paints and varnishes - Determination of resistance to humidity - Part 1: Condensation (single-sided exposure) (ISO 6270-1)*

EN ISO 6988, *Metallic and other non-organic coatings - Sulfur dioxide test with general condensation of moisture (ISO 6988)*

EN ISO 9227, *Corrosion tests in artificial atmospheres - Salt spray tests (ISO 9227)*

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