

# SVENSK STANDARD

## SS-EN 14783:2013



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**Takprodukter – Icke bärande plåt för taktäckning samt utvändig och invändig väggbeklädnad – Krav och provningsmetoder**

**Fully supported metal sheet and strip for roofing, external cladding and internal lining – Product specification and requirements**



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Denna standard ersätter SS-EN 14783:2006, utgåva 1.

The European Standard EN 14783:2013 has the status of a Swedish Standard. This document contains the official version of EN 14783:2013.

This standard supersedes the Swedish Standard SS-EN 14783:2006, edition 1.

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EUROPEAN STANDARD

**EN 14783**

NORME EUROPÉENNE

EUROPÄISCHE NORM

May 2013

ICS 77.140.50; 77.150.01; 91.060.10; 91.060.20

Supersedes EN 14783:2006

English Version

## Fully supported metal sheet and strip for roofing, external cladding and internal lining - Product specification and requirements

Tôles et bandes métalliques totalement supportées pour couverture, bardages extérieur et intérieur - Spécification de produit et exigences

Vollflächig unterstützte Dachdeckungs- und Wandbekleidungselemente für die Innen- und Außenanwendung aus Metallblech - Produktspezifikation und Anforderungen

This European Standard was approved by CEN on 24 February 2013.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

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.

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## Foreword

This document (EN 14783:2013) 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 November 2013, and conflicting national standards shall be withdrawn at the latest by November 2013.

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

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

For relationship with EU Directive(s), see informative Annex ZA, which is an integral part of this document.

This document supersedes EN 14783:2006.

In comparison to the previous edition, the following sections have been modified: Clause 3, subclause 5.3 and Annex ZA.

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, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.



## 1 Scope

This European Standard specifies the terminology, requirements and test methods for metal coil, strip, and flat sheets and factory made pieces intended for fully supported applications in roofing and wall cladding or lining. It does not apply to products manufactured on site.

This European Standard covers fully-supported aluminium, copper, lead, steel, stainless steel and zinc products with or without coatings, e.g. metallic, organic, inorganic or multi-layer (see Annex A).

This European Standard also includes rules for marking, labelling and evaluation of conformity.

Requirements concerning acoustical and insulation properties are not considered in this European Standard.

This European Standard does not include calculation or design requirements with regards to the works, installation techniques or the performance of the installed products.

## 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

CEN/TS 1187, *Test methods for external fire exposure to roofs*

EN 501:1994, *Roofing products from metal sheet — Specification for fully supported roofing products of zinc sheet*

EN 502:2013, *Roofing products from metal sheet — Specification for fully supported roofing products of stainless steel sheet*

EN 504:1999, *Roofing products from metal sheet — Specification for fully supported roofing products of copper sheet*

EN 505:2013, *Roofing products from metal sheet — Specification for fully supported roofing products of steel sheet*

EN 507:1999, *Roofing products from metal sheet — Specification for fully supported roofing products of aluminium sheet*

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

EN 10088-1, *Stainless steels — Part 1: List of stainless steels*

EN 12588:2006, *Lead and lead alloys — Rolled lead sheet for building purposes*

EN 13501-1, *Fire classification of construction products and building elements — Part 1: Classification using data from reaction to fire tests*

EN 13501-5, *Fire classification of construction products and building elements — Part 5: Classification using data from external fire exposure to roofs tests*

EN 13823, *Reaction to fire tests for building products — Building products excluding floorings exposed to the thermal attack by a single burning item*

EN ISO 6270-1, *Paints and varnishes — Determination of resistance to humidity — Part 1: Continuous condensation (ISO 6270-1)*

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

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

EN ISO 11925-2, *Reaction to fire tests — Ignitability of products subjected to direct impingement of flame — Part 2: Single-flame source test (ISO 11925-2)*

### 3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 501:1994, EN 502:2013, EN 504:1999, EN 505:2013, EN 507:1999, EN 12588:2006 and the following apply.

#### 3.1 base material

coated or non-coated coil, strip or flat sheet of metal used for the production of a roofing, cladding or lining product according to this European Standard

### 4 Requirements

#### 4.1 Materials

The materials for the fully supported metal products specified in this European Standard shall be in accordance with the relevant material standards listed in EN 501, EN 502, EN 504, EN 505, EN 507 and EN 12588. For multilayer coated steel sheet, the requirements as given in Annex A shall apply.

#### 4.2 Nominal thickness

The nominal thickness of the fully supported metal products (excluding any organic, inorganic or multilayer coating) shall be equal to or greater than the values given in Table 1 as specified in EN 501, EN 502, EN 504, EN 505, EN 507 and EN 12588.

Table 1 — Minimum nominal values of thickness

Type of metal	Reference of the European Standard	Specified minimum nominal thickness in mm <sup>a</sup>
Aluminium	EN 507	0,6
Copper	EN 504	0,5
Lead	EN 12588	1,25
Stainless steel	EN 502	0,4
Steel	EN 505	0,5
Zinc	EN 501	0,6
<sup>a</sup> Member States of use may require greater thickness than the value shown.		

### 4.3 Water permeability

As long as the products covered by this European Standard have no holes (as defects), they are water impermeable.

Where required, the absence of holes shall be checked by visual inspection of the finished product.

### 4.4 Dimensional change

The thermal expansion shall be taken into account in the change of dimensions of the product, where this change may have an effect on the performance of the product, by stating the appropriate thermal expansion coefficient.

In the absence of experimental data, the following thermal expansion coefficient shall be used:

- aluminium:  $24 \times 10^{-6} \text{ K}^{-1}$ ,
- copper:  $16,8 \times 10^{-6} \text{ K}^{-1}$ ,
- lead:  $29,3 \times 10^{-6} \text{ K}^{-1}$ ,
- stainless steel:  $10,0 \times 10^{-6} \text{ K}^{-1}$  to  $17,0 \times 10^{-6} \text{ K}^{-1}$ , depending on the grade, according to EN 10088-1,
- steel:  $12 \times 10^{-6} \text{ K}^{-1}$ ,
- zinc:  $22 \times 10^{-6} \text{ K}^{-1}$ ,

unless the manufacturer demonstrates by appropriate means that more accurate values are applicable.

### 4.5 Dimensional tolerances

The dimensional tolerances specified for roof covering products in the applicable standard from the following: EN 501, EN 502, EN 504, EN 505, EN 507 and EN 12588, shall not be exceeded.

For other products, the tolerances declared shall be appropriate, due account being taken of any national provisions of the country of use.

### 4.6 Vapour and air permeability

As long as the products covered by this European Standard have no holes (as defects), they are air and vapour impermeable.

Where required, the absence of holes shall be checked by visual inspection of the finished product.

### 4.7 Release of dangerous substances

Where the manufacturer wishes to make a declaration (e.g. when subject to regulatory requirements), the release of dangerous substances of the products specified in this European Standard shall be declared according to the provisions of 5.3.

### 4.8 Durability

The manufacturer shall state the type, thickness and grade of metal and, if appropriate, type and thickness (or mass) and/or category of any coating(s) to enable users to select products which may be expected to provide the required durability of the product having regard to the expected environment and/or exposure conditions and feasibility of maintenance.