



SLOVENSKI STANDARD

SIST EN 506:2008

01-november-2008

Nadomešča:
SIST EN 506:2002

Pločevina za pokrivanje streh - Specifikacije za samonosilne proizvode iz bakrene ali pocinkane pločevine

Roofing products of metal sheet - Specification for self-supporting products of copper or zinc sheet

Dacheindeckungsprodukte aus Metallblech - Festlegungen für selbsttragende Bedachungselemente aus Kupfer- oder Zinkblech

Produits de couverture en tôle métallique - Spécification pour les plaques de couverture en tôle de cuivre ou de zinc

Ta slovenski standard je istoveten z: **EN 506:2008**

ICS:

| | | |
|-----------|--|-----------------------------|
| 77.150.30 | Bakreni izdelki | Copper products |
| 77.150.60 | Svinčeni, cinkovi in kositrovi izdelki | Lead, zinc and tin products |
| 91.060.20 | Strehe | Roofs |

SIST EN 506:2008 **en,fr,de**

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EUROPEAN STANDARD
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EUROPÄISCHE NORM

EN 506

July 2008

ICS 91.060.20

Supersedes EN 506:2000

English Version

Roofing products of metal sheet - Specification for self-supporting products of copper or zinc sheet

Produits de couverture en tôle métallique - Spécification pour les plaques de couverture en tôle de cuivre ou de zinc

Dacheindeckungsprodukte aus Metallblech - Festlegungen für selbsttragende Bedachungselemente aus Kupfer- oder Zinkblech

This European Standard was approved by CEN on 30 May 2008.

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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 Management Centre has the same status as the official versions.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
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Contents

Page

| | |
|---|-----------|
| Foreword..... | 4 |
| Introduction | 5 |
| 1 Scope | 6 |
| 2 Normative references | 6 |
| 3 Terms and definitions, symbols and abbreviations..... | 6 |
| 3.1 General..... | 6 |
| 3.2 Materials | 6 |
| 3.3 Profile definitions..... | 7 |
| 3.4 Product geometry | 10 |
| 3.5 Symbols and abbreviations | 12 |
| 4 Requirements | 13 |
| 4.1 General..... | 13 |
| 4.2 Materials | 13 |
| 4.2.1 Copper | 13 |
| 4.2.2 Organic coatings or chemical treatments on zinc-copper-titanium..... | 13 |
| 4.2.3 Material tolerances | 13 |
| 4.3 Products | 14 |
| 4.3.1 Mechanical resistance..... | 14 |
| 4.3.2 Calculation..... | 14 |
| 4.3.3 Dimensions..... | 14 |
| 4.3.4 Dimensional tolerances for the profiled sheets..... | 14 |
| 4.3.5 Safety in case of fire..... | 14 |
| 5 Test methods..... | 14 |
| 5.1 Material properties..... | 14 |
| 5.2 Structural properties | 14 |
| 6 Designation | 15 |
| 7 Marking, labelling and packaging | 15 |
| 7.1 Marking and labelling | 15 |
| 7.2 Packaging and special ordering conditions | 15 |
| 7.3 Transport, storage and handling..... | 15 |
| Annex A (normative) Dimensional tolerances | 17 |
| A.1 Tolerances for trapezoidal sheets..... | 17 |
| A.1.1 General..... | 17 |
| A.1.2 Depth of profile | 17 |
| A.1.3 Depth of stiffeners | 18 |
| A.1.4 Pitch | 18 |
| A.1.5 Widths of crown and valley | 19 |
| A.1.6 Cover width | 19 |
| A.1.7 Radius of bends | 20 |
| A.1.8 Deviation from straightness | 21 |
| A.1.9 Deviation from squareness..... | 22 |
| A.1.10 Length..... | 22 |
| A.1.11 Deviation of side lap..... | 23 |
| A.1.12 Curve radius and angles | 23 |
| A.2 Tolerances for sinusoidal profiles | 24 |
| A.3 Tolerances on tiles | 24 |
| A.3.1 General..... | 24 |

| | | |
|-----------------------|---|----|
| A.3.2 | Depth of tile | 25 |
| A.3.3 | Web angular displacement (Figure A.12) | 26 |
| A.3.4 | Pitch | 26 |
| A.3.5 | Width of crown and valley (Figure A.14) | 26 |
| A.3.6 | Cover width | 27 |
| A.3.7 | Radius of bends | 27 |
| A.3.8 | Deviation from straightness | 28 |
| A.3.9 | Deviation from squareness | 28 |
| A.3.10 | Length | 29 |
| A.3.11 | Contraction or bulging | 29 |
| A.4 | Methods for measuring profiles | 30 |
| A.4.1 | General | 30 |
| A.4.2 | Depth of profile | 30 |
| A.4.3 | Depth of stiffeners | 30 |
| A.4.4 | Pitch | 30 |
| A.4.5 | Width of crown and valley | 31 |
| A.4.6 | Cover width | 32 |
| A.4.7 | Radius of bends | 32 |
| A.4.8 | Straightness | 32 |
| A.4.9 | Squareness | 32 |
| A.4.10 | Length | 32 |
| A.4.11 | Side laps | 32 |
| A.4.12 | Side lap ripple | 32 |
| Annex B (informative) | Test methods for concentrated load | 34 |
| Bibliography | | 35 |

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EN 506:2008 (E)**Foreword**

This document (EN 506:2008) has been prepared by Technical Committee CEN/TC 128 “Roof covering 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 January 2009, and conflicting national standards shall be withdrawn at the latest by January 2009.

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 supersedes EN 506:2000.

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

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Introduction

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

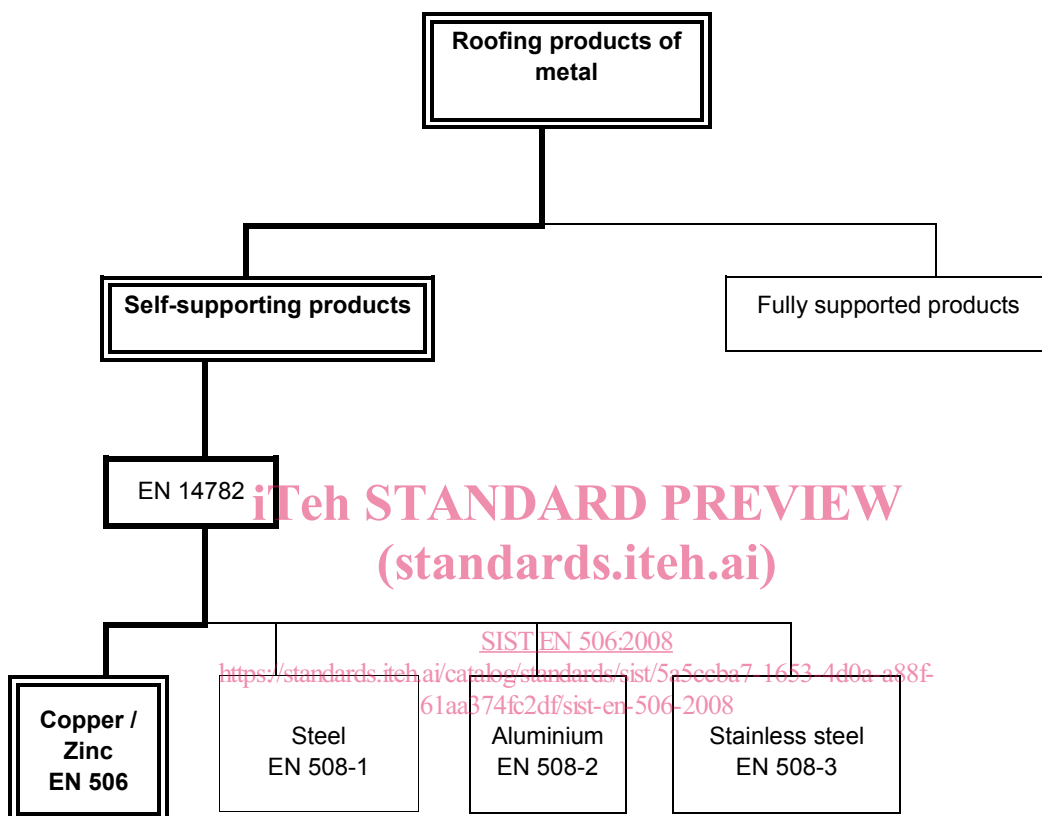


Figure 1 — Framework of standards

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

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

EN 506:2008 (E)**1 Scope**

This European Standard specifies requirements for self-supporting roofing products for discontinuous laying made from copper or zinc-copper-titanium alloy sheet with or without additional organic coatings.

The standard establishes general characteristics, definitions 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 before they are despatched from the factory. It specifies the requirements for products which enable them to meet all normal service conditions.

The standard applies to all discontinuously laid self-supporting external profiled sheets for roofing with the exception of tiles with a surface area less than 1 m² and produced by stamping. These profiled roof 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.

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

2 Normative references

The following referenced documents are indispensable for the application 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 988, *Zinc and zinc alloys - Specifications for rolled flat products for building*

EN 1172, *Copper and copper alloys - Sheet and strip for building purposes*

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3 Terms and definitions, symbols and abbreviations

For the purposes of this document, the following terms and definitions apply.

3.1 General**3.1.1****self-supporting product**

product which will, by virtue of its material and shape, support all applied loadings (e.g. snow, wind, foot traffic) and transmit these loadings to discretely spaced structural supports.

3.2 Materials**3.2.1****copper**

cold rolled copper sheets of grade Cu-DHP, phosphorus-deoxidized copper - high residual phosphorus

NOTE 1 The chemical composition is given in EN 1172.

NOTE 2 The system used for designating the materials specified in this standard is based on ISO 431 and ISO 1190-1.

3.2.2**zinc-copper-titanium**

alloy made from zinc grade Z1 conforming to EN 1179, that is 99,995 % minimum zinc content, with addition of alloying elements and the composition of which is as specified in EN 988

3.2.3**organic coated zinc-copper-titanium**

painted, laminated or coil coated (continuously organic coated) zinc-copper-titanium sheet

3.3 Profile definitions**3.3.1****trapezoidal profiled sheet**

self-supporting sheet which is designed to allow it to be side and end lapped, the crowns of which may be rounded and, in addition, the crowns, web and valley may be stiffened

NOTE See Figures 2 to 5.



Figure 2 — Part of typical trapezoidal profile

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Figure 3 — Part of typical trapezoidal profile with rounded crowns

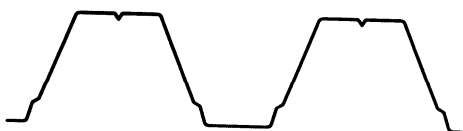


Figure 4 — Part of typical trapezoidal profile with stiffened crown and web



Figure 5 — Part of typical trapezoidal profile with stiffened valley

EN 506:2008 (E)

3.3.2

sinusoidal profiled sheet

self-supporting sheet which is designed to allow it to be side and end lapped, comprising a series of arc shaped crowns and valleys interconnected with tangential webs

NOTE See Figure 6.



Figure 6 — Part of typical sinusoidal profiled sheet

3.3.3

standing seam and concealed fix sheet

self-supporting sheet profiled in such a way that the fixings are hidden within the construction and are not exposed to the weather

NOTE 1 See Figures 7 and 8.

NOTE 2 The profile shape is designed to allow the formation of side laps on site.

NOTE 3 As these types of roof covering products are used in proprietary roofing systems, no structural requirements are given within this standard.

NOTE 4 These products are normally designed by testing

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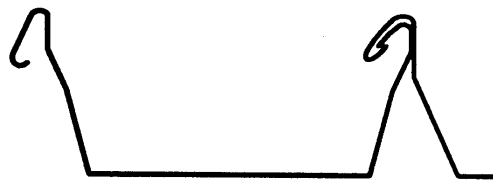


Figure 7 — Typical standing seam profile

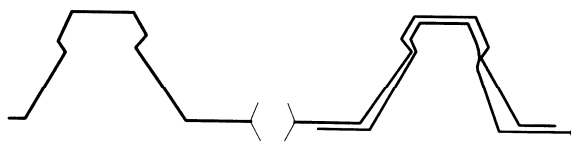


Figure 8 — Typical concealed fix profile

3.3.4 tile profiles

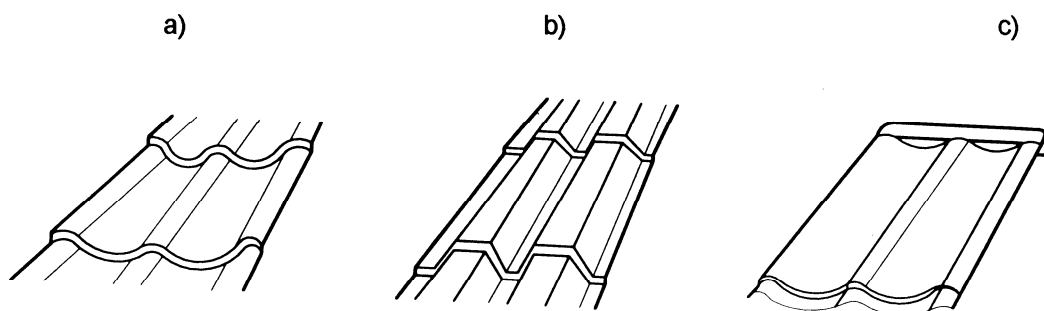
parts of typical tile profiled sheets that can allow the sheet to be side and/or end lapped

NOTE 1 See figures 9a, 9b and 9c.

NOTE 2 The tile profiles may include transverse steps.

NOTE 3 As these types of roof covering products are used in proprietary systems no structural requirements are given within this standard.

NOTE 4 These products are normally designed by testing.



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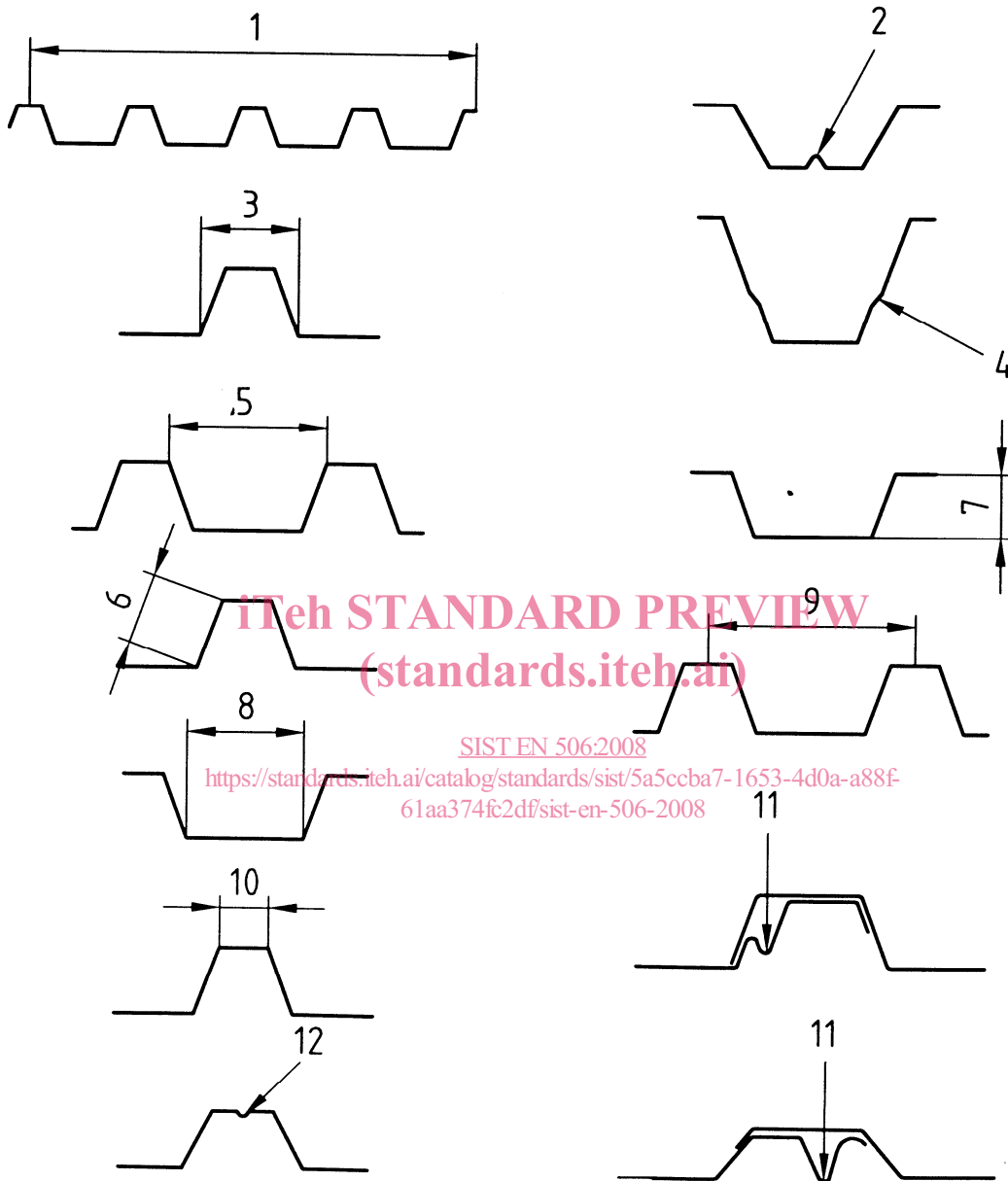
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Figure 9 — Typical tile profiles

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3.4 Product geometry

NOTE The names for various parts of typical trapezoidal profiles sheets are given in Figures 10 a) and 10 b), with additional definitions for sinusoidal profiles in Figure 11 and tile profiles in Figure 12.



Key

| | |
|--------------------|--------------------|
| 1 Cover width | 7 Depth |
| 2 Valley stiffener | 8 Valley |
| 3 Rib | 9 Pitch |
| 4 Web stiffener | 10 Crown |
| 5 Trough | 11 Drainage groove |
| 6 Web | 12 Crown stiffener |

a) Definitions of the parts of typical trapezoidal profiled sheets